

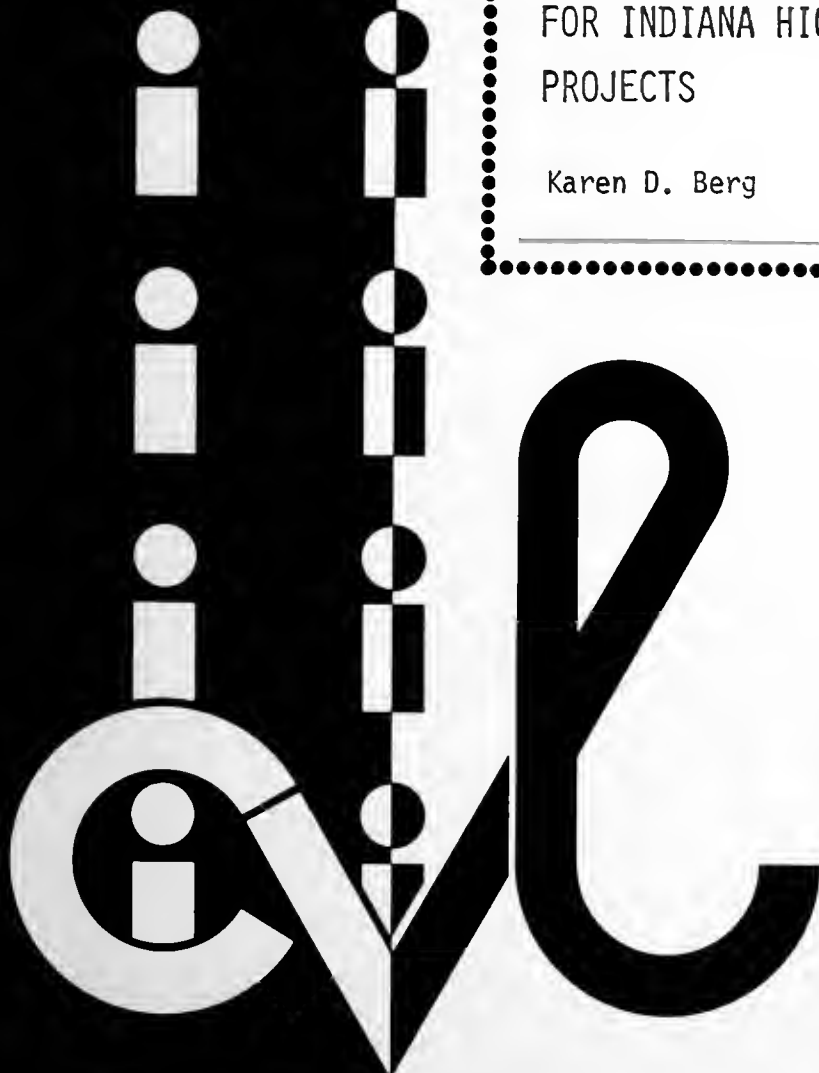
SCHOOL OF
CIVIL ENGINEERING
INDIANA
DEPARTMENT OF HIGHWAYS

JOINT HIGHWAY RESEARCH PROJECT

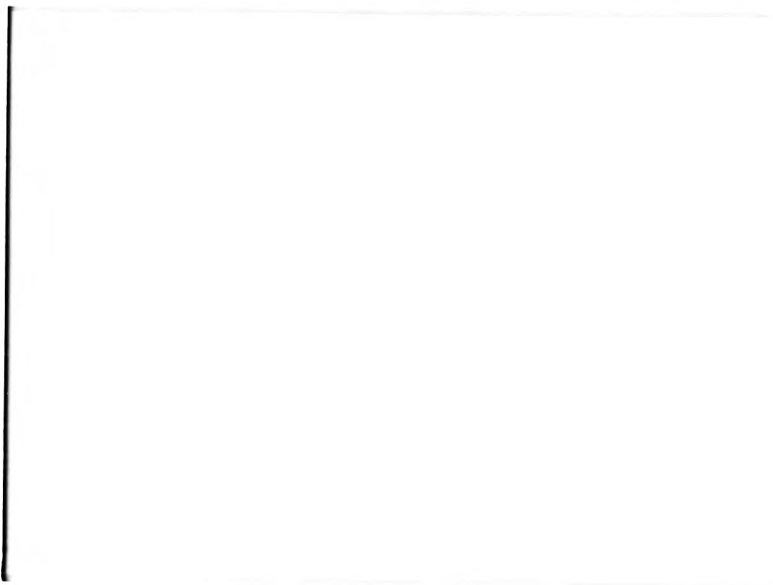
JHRP-83-8

AN INVESTIGATION OF CONTRACT CLAIMS
FOR INDIANA HIGHWAY CONSTRUCTION
PROJECTS

Karen D. Berg



PURDUE UNIVERSITY



JOINT HIGHWAY RESEARCH PROJECT

JHRP-83-8

AN INVESTIGATION OF CONTRACT CLAIMS
FOR INDIANA HIGHWAY CONSTRUCTION
PROJECTS

Karen D. Berg

Digitized by the Internet Archive
in 2011 with funding from
LYRASIS members and Sloan Foundation; Indiana Department of Transportation

<http://www.archive.org/details/investigationofc00berg>

Final Report
AN INVESTIGATION OF CONTRACT CLAIMS
FOR INDIANA HIGHWAY CONSTRUCTION PROJECTS

To: H. L. Michael, Director
Joint Highway Research Project
August 30, 1983
Project: C-36-67M

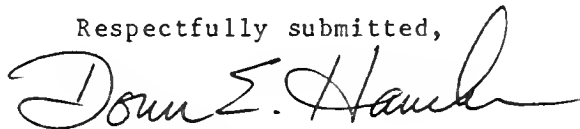
FROM: Donn E. Hancher, Research Engineer
Joint Highway Research Project
File: 9-11-13

The attached report is the Final Report on the JHRP Study "An Investigation of Contract Claims for Indiana Highway Construction Projects". The Report has been authored and conducted by Karen Denise Berg, Graduate Instructor in Research on our staff, under the direction of Professor Donn E. Hancher.

Objectives of the research were to compile a list of the most common disputes encountered by IDOH personnel, to identify the current resolution process used by the IDOH, to evaluate how disputes are currently being handled, and to recommend guidelines or methods of improving the current system for resolving disputes and claims. All four objectives were attained and are detailed in the Report.

The findings of the Study have been made available to the IDOH Construction Division and we will continue to work with them on implementation of the results.

Respectfully submitted,



Donn E. Hancher
Research Engineer

DEH:kdb

| | | |
|-----------------------|------------------|----------------|
| cc: A. G. Altschaeffl | G. K. Hallock | G. T. Satterly |
| J. M. Bell | J. F. McLaughlin | C. F. Scholer |
| W. L. Dolch | R. D. Miles | R. M. Shanteau |
| R. L. Eskew | P. L. Owens | K. C. Sinha |
| J. D. Fricker | B. K. Partridge | C. A. Venable |
| G. D. Gibson | | L. E. Wood |
| W. H. Goetz | | S. R. Yoder |

Final Report
AN INVESTIGATION OF CONTRACT CLAIMS
FOR INDIANA HIGHWAY CONSTRUCTION PROJECTS

by

Karen Denise Berg
Graduate Instructor in Research

Joint Highway Research Project

Project No.: C-36-67M

File No.: 9-11-13

Prepared as Part of an Investigation

Conducted by

Joint Highway Research Project
Engineering Experiment Station
Purdue University

in cooperation with the
Indiana Department of Highways

Purdue University
West Lafayette, Indiana
August 30, 1983

ACKNOWLEDGEMENTS

The author would like to convey her appreciation to the Indiana Department of Highways for their financial support of the research.

She would also like to express her gratitude to her major professor, Dr. Donn E. Hancher, for his guidance, assistance, and encouragement with the research and the graduate course work.

In addition, the author would like to thank the Indiana Department of Highway personnel and the members of the Indiana Constructors, Inc. who provided her with an ample amount of data and suggestions on the research topic.

Finally, the author would like to recognize the Federal Highway Administration and the states of Wisconsin, Ohio, Illinois, and Kentucky for their assistance in the preparation of this study.

TABLE OF CONTENTS

| | Page |
|---|------|
| LIST OF TABLES | v |
| LIST OF FIGURES | vi |
| ABSTRACT | vii |
| CHAPTER 1 - INTRODUCTION | 1 |
| 1.1 Justification of the Study | 2 |
| 1.2 Objectives of the Study | 4 |
| 1.3 Methods of Completing the Research | 6 |
| CHAPTER 2 - CONSTRUCTION DISPUTES AND CLAIMS | 14 |
| 2.1 Disputes | 15 |
| 2.1.1 Resolution By Chain of Command | 18 |
| 2.1.2 Resolution By Internal Committee | 19 |
| 2.1.3 Resolution By External Committee | 21 |
| 2.2 Claims | 22 |
| 2.2.1 Litigation | 23 |
| 2.2.2 Arbitration | 27 |
| CHAPTER 3 - THE CURRENT IDOH RESOLUTION PROCESS | 35 |
| 3.1 The Project Level | 35 |
| 3.2 The District Office Level | 37 |
| 3.3 The Central Office Level | 40 |
| 3.4 Litigation | 43 |
| CHAPTER 4 - RESULTS OF THE SURVEYS | 45 |
| 4.1 Summary of Surveys | 46 |
| 4.1.1 The IDOH Survey | 46 |
| 4.2.1 The Contractor Survey | 48 |
| 4.2 The IDOH Survey Results | 50 |
| 4.2.1 Background Information | 50 |
| 4.2.2 Descriptive Analysis of Disputes | 52 |
| 4.2.3 Quantitative Analysis of Disputes | 57 |
| 4.2.4 The Current System | 58 |
| 4.2.5 Suggestions and Alternatives | 60 |
| 4.3 The Contractor Survey Results | 63 |
| 4.3.1 Background Information | 63 |

TABLE OF CONTENTS CONT'D

| | |
|--|------|
| 4.3.2 Descriptive Analysis of Disputes | .64 |
| 4.3.3 Quantitative Analysis of Disputes | .67 |
| 4.3.4 The Current System | .68 |
| 4.3.5 Suggestions and Alternatives | .69 |
| CHAPTER 5 ~ ALTERNATIVE RESOLUTION SYSTEMS | .71 |
| 5.1 Wisconsin Methodology | .72 |
| 5.2 Ohio Methodology | .73 |
| 5.3 Illinois Methodology | .74 |
| 5.4 Kentucky Methodology | .75 |
| 5.5 The FHWA Study | .76 |
| CHAPTER 6 ~ SUMMARY AND RECOMMENDATIONS | .82 |
| 6.1 Summary | .82 |
| 6.2 Recommendations | .85 |
| 6.2.1 Discussion of Recommendations | .90 |
| BIBLIOGRAPHY | .96 |
| APPENDICES | |
| Appendix A : The IDOH Survey | .97 |
| Appendix B : The Contractor Survey | .104 |

LIST OF TABLES

| Table | Page |
|-----------------------------------|------|
| 1. Summary of FHWA Study. | .81 |

LIST OF FIGURES

| Figure | Page |
|--|------|
| 1. The Current IDOH Dispute Resolution Process | .44 |

ABSTRACT

Berg, Karen Denise, MSCE, Purdue University, August 1983, "An Investigation of Contract Claims for Indiana Highway Construction Projects". Major Professor: Dr. Donn E. Hancher.

It was the purpose of this study to investigate the current dispute resolution process of the Indiana Department of Highways, and to propose changes in the procedure that will reduce the number of disputes which evolve into claims and result in litigation.

In order to accomplish the primary goal of this study, it was necessary to establish four distinct objectives. The first objective was to compile a list of the most common disputes encountered by IDOH personnel and to determine what factors, if any, these disputes shared. The second objective was to expand on the knowledge acquired from the first objective in order to identify the current system being used by the IDOH. The third objective utilized the background information gathered in order to evaluate how the disputes are currently being handled. The fourth objective was to recommend guidelines or methods of improving the current system for resolving disputes and claims.

It was first necessary to define the two words, dispute and claim. After defining these two terms, several

interviews were then conducted with IDOH personnel. From these interviews, a survey was prepared and distributed to a total of fifty-four district and project level personnel. With assistance from the Indiana Constructors, Inc. interviews and surveys were also conducted of the contracting community. In addition, the four surrounding states of Wisconsin, Ohio, Kentucky, and Illinois were interviewed about their present resolution processes. And finally, the FHWA provided the researcher with a summary of all fifty states' resolution processes.

From the information gathered during the study, five recommendations were developed. The first recommendation is the development of standard operating policies for the resolution of clear-cut time extension requests at the district level. The second recommendation is the review of the current monetary limitations which apply to disputes involving new work and changed work. The third recommendation proposes the development of a dispute tracking system. The fourth recommendation involves the formation of a three member Construction Claims Committee. The fifth recommendation is the consideration by the IDOH of using arbitration as the final step in their claims resolution system.

CHAPTER 1

INTRODUCTION

One of the many public services performed by the Indiana Department of Highways (IDOH) is the administration of construction contracts. This multi-step process begins prior to the actual start of construction when the IDOH first advertises for bids. Bids are accepted and evaluated, and the contract is then awarded to the lowest qualified bidder. Once a notice to begin construction is issued, the contractor can begin work on the project. As the project progresses, it is the responsibility of IDOH personnel to monitor both the quantity and the quality of the contractor's work. Upon completion of the construction phase, the final payment documents are prepared and approved, and final payment is made to the contractor.

By its very nature, this administrative process requires that the IDOH and the contractor work together to complete a construction project. The contractor must perform the actual construction, and the IDOH must make inspections to confirm that the contractor's work is acceptable. In spite of this working relationship between the IDOH and the contractor, disagreements concerning the contract itself are quite common. These disagreements, which are usually

called claims or disputes, occur with some frequency and disrupt the natural flow of the construction activity. Resolving these disagreements can be a long, tedious, and costly process. So although straightforward in theory, in practice the administration of construction contracts is far more complicated than the preceding paragraph implies.

Avoiding all disputes would simplify the administration of contracts greatly, but unfortunately, that is not possible. A certain number of disputes and claims are virtually inevitable, so a resolution process must be implemented if disagreements are to be dealt with effectively and efficiently. This has become an even more important issue in recent years as disputes on highway construction projects have increased. Not only are more disputes being filed, but more of these disputes are evolving into formal claims involving lengthy legal action. Consequently, it was the purpose of this study to investigate the current dispute resolution process of the Indiana Department of Highways, and to propose changes in the procedure that will reduce the number of disputes which evolve into claims and result in litigation.

1.1 Justification of the Study

Construction contract claims and disputes have always existed in the construction industry, but until recent years they have not represented a serious problem. However, evidence now suggests otherwise. For example, in the last

decade a number of firms specializing in contract claims management and prevention have become prominent.(3) Professional societies have also become involved by sponsoring seminars devoted exclusively to claims prevention and resolution. In addition, more lawyers have begun to concentrate in the area of construction contract litigation.(3) In 1979, a periodical entitled Construction Claims Monthly was first published by Construction Industry Press. This journal, which is now being published by Business Publishers, Inc., is devoted exclusively to providing current information on construction claims and disputes.

Since the State of Indiana repealed the principle of sovereign immunity approximately ten years ago, six lawsuits have been filed over construction contract disputes. Despite this increase in lawsuits, the IDOH is still settling the vast majority of its disputes and claims before they become serious. However, because the number of disputes has increased, the potential for problems has also increased. Consequently, in an effort to address the claims issue before it becomes a serious problem in Indiana, the IDOH has requested the review and revision of its current resolution process. It is hoped that the recommendations made in this study will aid the IDOH in reducing construction contract claims by promoting the resolution of disputes before they become claims.

1.2 Objectives of the Study

The first step in the formulation of this research investigation involved converting the primary goal into a set of objectives. This was accomplished by dividing the primary goal into a group of four unique but interrelated goals. The following section is intended to elaborate upon these four goals or objectives in order to explain how the primary goal of this study was accomplished.

The FIRST OBJECTIVE of this study was to compile a list of the most common disputes encountered by IDOH personnel and to determine what factors or traits, if any, these disputes shared. Before this information could be collected, however, it was first necessary to develop formal definitions for the words, dispute and claim. Once these formal definitions were developed, a descriptive analysis of the disputes encountered by IDOH personnel was done. This included gathering both qualitative and quantitative data on the disputes. It was from this analysis that a list of common disputes was obtained and a series of shared traits was identified.

The SECOND OBJECTIVE of this research was to expand on the knowledge acquired from the first objective in order to identify the current system being used by the IDOH. Initially, this required determining where in the IDOH system a dispute was first received. Following that determination, it was possible to follow the dispute through the basic steps of the current resolution process. This involved

tracing the dispute from the Project through the District Office and ultimately to the Central Office. The final portion of the second objective was the determination of how a dispute was handled after all interdepartmental procedures had failed to resolve the disagreement.

The THIRD OBJECTIVE utilized the background information gathered from the first two objectives to evaluate how the disputes are currently being handled. For example, comparisons were made of: the number of disputes that were being handled; the number of levels at which the disputes were being handled; and the levels at which they were being solved. The relationships that exist between the different levels of the IDOH were also examined, as were the relationships between the various levels of the IDOH and the contracting community. This information was then combined to provide an overall understanding of how disputes are currently being handled.

Finally, the FOURTH OBJECTIVE of this research was to recommend guidelines or methods of improving the current system for resolving disputes, if necessary. Before any recommendations could be made, however, it was necessary to conduct a literature review to determine other methods of resolution. Surrounding states were interviewed on how their systems worked and what problems, if any, they were experiencing. In addition, the Federal Highway Administration (FHWA) was contacted concerning any information that they might have about other systems being used across the

United States. With this information a comparison was made between the current system being used by the IDOH and the other methods being used around the country. From this comparison, it was then possible to formulate the necessary recommendations.

1.3 Methods of Completing the Research

There were a number of research techniques used to accomplish the four primary objectives of this study. Direct input from the IDOH and the contracting community was obtained from personal interviews and written surveys. Current literature was reviewed and firms which specialize in contract claims and disputes were consulted. Personal interviews and telephone interviews were conducted with personnel from surrounding states, and the Federal Highway Administration (FHWA) was contacted as well. The telephone conversation with the FHWA was followed by the receipt of a recently conducted NCHRP synthesis study which summarized the current practices of each state in the nation. The remaining portion of this section has been devoted to further elaboration of these methods.

The first interview conducted in this study was with the the Chief Engineer, Mr. William Ritman, and Field Construction Engineers, Mr. Dick Schwartz and Mr. Tim Bertram, all of the Construction Division of the IDOH. The primary purpose of the interview was to determine what the current situation was in the IDOH with respect to construction

contract claims and disputes. Initially, the discussion centered on what the Central Office saw as the common disputes being encountered by IDOH personnel. It was decided that the district offices could provide more detailed information on the different types of disputes. This led to a discussion on the number of disputes which had developed into claims since the repeal of sovereign immunity, and the enormous amount of time that personnel had spent on these claims was emphasized. From this and other comments an overall idea of the Central Office's perception of the current resolution system was obtained.

From the information received in this interview a set of questions was developed. These questions were subsequently used in interviews with the construction engineer and the three area engineers from the Crawfordsville District. The primary purpose of these interviews was to explore in more detail the topics discussed with the Central Office in order to further refine the questions before other districts were interviewed. The questions asked were as follows:

1. What are the most common disputes that you run into?
2. How many disputes do you normally handle per year?
3. How do you process a dispute?
4. Who is the next person in line that handles the dispute once you determine that the problem cannot be solved at your level?
5. How many disputes are you able to solve?

6. Are there any common factors among disputes?
7. Do most contractors abide by the procedures defined in the specifications?
8. Do you feel the process presently followed adequately takes care of the problems and disputes arising today?
9. What changes, if any, would you make in the present process?

During the course of the interviews a better understanding of the District's role in the overall resolution process was obtained. The District personnel offered a slightly different perception on the issue of claims and disputes which, in turn, produced additional questions concerning the Central Office's role in the resolution process.

Because the Crawfordsville interviews generated more questions, it was necessary to return to the Central Office for clarification on certain points. This interview was conducted with Field Construction Engineer, Dick Schwartz, and provided a more complete explanation of the Central Office's role in the resolution process. Topics discussed included:

1. failed materials
2. preconstruction meetings
3. liquidated damages
4. the accuracy of contract documents
5. decision time
6. the specifications

7. uniformity between districts

Because the actual number of questions asked exceeded thirty, the questions themselves were not listed.

The next set of interviews that was conducted involved the other five districts; LaPorte, Ft. Wayne, Greenfield, Vincennes, and Seymour. The interviews were conducted in each district with the construction engineer and the three area engineers, just as they were in the Crawfordsville District. Also, the questions asked were very similar to the ones asked at the Crawfordsville District. The interviews were not all identical because whenever an interesting point or comment was made in one interview, special care was made to bring the topic up in the next interview. The lack of total uniformity between the interviews was not considered a problem because these interviews did not represent the final set of results upon which recommendations were to be made.

Following the completion of these personal interviews, the information obtained was combined to produce a final set of questions that was then distributed to IDOH personnel. Unlike the previous sets of questions, these questions took the form of a written questionnaire that was mailed to the six districts and filled out by the appropriate personnel. In this case, the appropriate personnel were the following: the construction engineer, the three area engineers, and five of the most experienced project supervisors in the district. It was left up to the construction engineer as to who the five most experienced were. All personnel received

the same questionnaire, and the results of this survey were subsequently used to develop the final recommendations.

The format of this questionnaire was much different from the previous interviews. Instead of simply asking essay-type questions, the responses of the previous interviews were set up in a tabular form, and the respondents were asked to rank the choices accordingly. The primary reason for this type of format was to provide the respondent with a relatively simple form to fill out, that would still provide the study with as much information as possible. In order not to restrict the respondents to previously given answers only, space was allowed for additional comments. A copy of this survey is in Appendix A.

At approximately the same time the personal interviews were being conducted in each of the six districts, the contracting community was being contacted for its opinion on construction contract claims and disputes. In order to get an overview of the contractors' situation with respect to claims and disputes, a personal interview was conducted with E. D. (Jack) McDonald, Assistant Secretary of Indiana Constructor's, Inc.. From that discussion, a short set of questions were prepared and a few contractors were interviewed. The questions asked during these telephone interviews were almost identical to the questions which were asked in the personal interviews of IDOH personnel. After completing this series of interviews, a final questionnaire was developed. It should be noted that many of the

questions used in the contractor's survey were also used in the IDOH's survey. The final questionnaire was sent out to approximately thirty contractors across the State of Indiana. All of the contractors were members of the Indiana Constructors, Inc., and care was taken to choose contractors who were thought to perform work for the IDOH. The results of this survey were also used in the development of the final recommendations. A copy of the questionnaire is in Appendix B.

The second phase of this study involved collecting information on resolution processes that were currently being used by other agencies in construction. Initially, a literature review was conducted. This involved a review of many journals, including Construction Claims Monthly, which is published by Business Publishers, Inc.. In addition, companies which specialize in the areas of construction contract claims prevention and resolution were contacted. Those interviews provided additional suggestions and reactions to the current resolution processes being used.

In order to better understand the systems employed by the surrounding states; Wisconsin, Ohio, Illinois, and Kentucky were all contacted. The states of Wisconsin and Ohio were contacted by telephone, and it was possible to obtain the necessary information without conducting a personal interview. The states of Illinois and Kentucky were also contacted by telephone, but it was decided that a personal visit to the central office of each state would accomplish

the desired results better than a telephone interview. The purpose of each interview and telephone conversation was to gain a better understanding of each state's resolution process. Because each state differed somewhat in its approach, it was necessary to vary the questions in each discussion.

In an effort to find out what the rest of the states were doing, the Federal Highway (FHWA) was contacted. Fortunately, a study had just been completed which supplied the necessary information. The study, entitled Summary of State Laws and Regulations Governing Settlement of Highway Construction Contract Claims and Claim Disputes, was prepared by Ross Netherton in conjunction with NCHRP Project 20-5, Synthesis of Highway Practice Study 13-01, "Construction Contract Claims: Causes and Methods of Settlement". Basically the report outlined in some detail the current resolution processes in each state. The description provided by Mr. Netherton included the following items:

1. General Statements
2. Administrative Remedies and Procedures
3. Special Adjudicative Remedies and Procedures
4. Arbitration and/or Litigation Remedies and Procedures

In addition, a brief fifteen page summary of all of the states' procedures was provided in tabular form at the end of the study.

The final part of this research was the development of a recommendation for changes to the current resolution process used by the IDOH. The available alternatives were

discussed with IDOH Construction Division personnel and final recommendations were prepared. Throughout this process consideration was given to both the practicality and the acceptability of each alternative. It was the intention of the study to provide practical suggestions, as well as ones which would be accepted by the personnel who would have to use the revised resolution process. At the conclusion of this process final recommendations were presented to the IDOH for their final review.

CHAPTER 2

CONSTRUCTION DISPUTES AND CLAIMS

When involved in discussions on construction contract claims and disputes, it is sometimes very difficult to discriminate between the two words, dispute and claim. For example, during the literature review for this study, it became apparent that more than one definition was being used for each of the two words. It was not uncommon to see one author describe a situation as a dispute, while another author was referring to the same type of situation as a claim. On the other hand, it was also not unusual to see an author use the two terms interchangeably.

Consequently, in order to prevent any misunderstandings during this research investigation, it was necessary to define each of the two words, dispute and claim. This was done in the following chapter through a discussion of common disputes, and a review of the resolution processes that were found to be typically associated with both disputes and claims. It should be noted, however, that this discussion of common disputes was intended to be general in nature and does not necessarily represent the common types of disputes encountered by IDOH personnel. The disputes commonly encountered by IDOH personnel are discussed in Chapter Four.

2.1 Disputes

For the purpose of this research, the term dispute was defined as a disagreement over any contract provision or provisions which occurred between IDOH personnel and the contractor or his representative. The word disagreement as used in the definition of a dispute referred only to a difference of opinion, and was not intended to include requests, unless the request subsequently led to a difference of opinion. For example, a request by a contractor for clarification on a portion of the contract documents was not considered to be a dispute in this study unless the contractor then disagreed with IDOH personnel on their interpretation. Also, any questions asked by the contractor or an IDOH official that were answered to his satisfaction were not considered a dispute. Only when the contractor or IDOH personnel disagreed with the response was the situation considered a dispute.

Generally, it was found that disputes arise between two parties for a wide variety of reasons. Disagreements over the contract time, for example, are very common. Delays which cause a project to extend beyond its original completion date very often bring about differences of opinion concerning who is really responsible for the delay. It is not uncommon for arguments over liquidated damages to occur, and requests for extensions on contract times can also result in disagreements. Work day charges are another source of time related disputes. Typically, this type of dispute centers

on a difference of opinion as to whether or not a work day should have been charged against the contract time.

Another common source of disputes is the errors and omissions that occur in the plans and specifications.(3) The result of these oversights is usually new work or changed work. In this study, new work was considered to be any work not previously mentioned in the contract documents for which additional costs have been incurred. Changed work, on the other hand, was defined to be any work previously described in the contract documents that was subject to a change in cost because of the error or omission. For example, in the middle of a project it was discovered that sodding was necessary but the contract only called for seeding. The sodding would be considered new work because there was no established price set in the original contract documents. If, however, sodding had been called for in the original contract and the quantity had simply changed during the project, then the sodding would be considered changed work, not new work. The difference between new work and changed work is not always clear cut, and this sometimes causes disputes. Even if the two parties can come to an agreement as to whether the work is new or changed, a disagreement may occur over how much is to be paid and/or who is going to pay it.(3)

The interpretation of specifications also leads to many disputes.(3) In some cases, a dispute may occur because the ". . . specifications are not written in the office to

conform to the way the game is played in the field."(3,p.16) In other instances problems may arise because the specifications are ". . . out of date, in conflict, or speak to situations not found in the project."(3,p.15) Another source of disputes involves the intent of the specifications. "Too often . . . the special ability to read the 'intent' of the specifications is not possessed by the low bidder soon enough."(3,p.15) Consequently, disagreements over the intent of the specifications are common.

Another source of disagreements is rejected work. Whenever an inspector finds it necessary to reject work because he feels that it does not meet the requirements in the specifications, his judgement will very likely be questioned by the contractor. Even if the parties involved agree on the quality of the work itself, they may disagree over who is actually responsible for the poor work. There is also room for disagreement when it comes time to decide what to do with the rejected work. One party may feel that a penalty should be imposed, while the other party may think that the work should be redone.

Changed conditions is another area which causes disputes.(3) For example, the excavation should have been dry but much to everyone's surprise it filled up with water. Perhaps the soil reports showed clay, but a pocket of organic matter or rock was discovered instead. Maybe the preceding contractor failed to complete his work on time. And of course, there is always the possibility that

conditions have changed since the job was first envisioned.(3) Regardless of the changed condition, neither the owner nor the contractor is going to be willing to absorb the added costs, and this results in disagreements.

2.1.1 Resolution By Chain of Command

One of the typical methods used by transportation agencies for settling disputes that was identified during this study is based on the "chain of command" approach. The dispute is usually submitted at the job site, and a decision is then made. If the decision proves to be unsatisfactory to the Contractor, the dispute and a recommendation from the first level are sent to the second level of authority for consideration. This process is continued until the dispute is resolved or the final level of authority has been reached. If the decision of the final level of authority fails to resolve the dispute, the dispute is considered to be a claim, and other methods, which will be discussed in the section on claims, are used.

This type of approach must be designed to resolve the majority of disputes at its lower levels if it is to be effective. Also, if too many levels of authority exist, the process becomes repetitive and dispute resolution is needlessly slowed down. Contractors can participate in this type of resolution system, but they typically have no control over who is selected in the owner's organization to review the dispute. Consequently, in some instances,

contractors feel as though decisions rendered are somewhat biased.

The "chain of command" approach is the basis for the system currently being used by the IDOH. The existing system will be discussed more fully in the next chapter.

2.1.2 Resolution By Internal Committee

The second method commonly used by transportation agencies to resolve disputes is an internal committee. Normally, this committee is not the first step in an organization's resolution process. Typically, some amount of informal discussion must have occurred before the dispute is considered serious enough to submit to a committee. The committee is composed of three to five members, all of whom are connected in some way with the owner. One typical requirement of the committee members is that they all possess a basic knowledge of the construction area in which the dispute is over. In addition, none of the members normally have previous experience with the dispute being heard. In other words, anyone who has already rendered a decision on the dispute is not permitted to sit in judgement a second time. The decisions of the internal committee are usually considered binding, but this is not always true. The internal committee may or may not be the final step in an organization's resolution process before the dispute is considered a claim. Again, the methods for settling claims will be discussed in the next section.

More than one selection process is used to create the committee. In some instances, a different committee is formed every time a dispute occurs. This is done so that as the type of disputes change so do the personnel on the committee. Very often, the members come from an approved list of people. The members are selected by the owner, and typically, the contractor has no input into the selection process. This may have no direct impact on the quality of the committee, but it certainly does nothing to reinforce the idea of impartiality in the mind of the contractor.

Other committees serve for a set period of time and the members simply sit in judgement on all of the disputes that arise. Members are not replaced if they are not familiar with the type of dispute that is being heard, so this is sometimes a problem. Again, the members are normally appointed by the owner, and the contractor usually has no input into the composition of the committee. Consequently, the impartiality of this committee may also be questionable from the contractor's point of view.

Another system for determining who sit on the committee involves assignment by job title. Whoever is in a particular job simply becomes a member of the committee, and remain a member as long as he holds that position or the until that position is removed from the committee. Again, no guarantee exists to insure that all committee members are knowledgeable in the correct areas. Of course, the quality of the people appointed is somewhat controlled by the job titles

that comprise the committee. But this method still leaves room for unqualified people to be appointed. In addition, the impartiality of the committee is questionable from the contractor's point of view. The contractor have no control over either the job titles that comprise th committee or the selection of the personnel who hold those job titles.

2.1.3 Resolution By External Committee

The third common method for resolving disputes is an external committee. It is very similar to the internal committee except that the external committee contains people from the community as well as from the owner's organization. Like internal committees, external ones usually have three to five members , and the requirements for the members are typically the same. External committees are normally the last step in an organization's resolution process. External committees are very often binding, although this is not always true. If the dispute is not solved at this level, it is usually considered to be a claim.

Selecting an external committee is very similar to selecting an internal committee. The external committee is usually either appointed to hear a specific case or for a set period of time. The job title approach is not normally used.

When an external committee is appointed for a set period of time, the selection process is typically the same as that of an internal committee. The members are appointed

by the owner, and the committee does not change composition with each dispute. The contractor has no input into the selection process, so lack of impartiality can sometimes be an issue.

When an external committee is appointed to hear a specific case, however, the committee is not usually selected the same way as an internal committee. Unlike an internal committee, when an external committee is appointed for this purpose the contractor is normally included in the selection process. The owner and the contractor each select a member, and the two then select the third. In some instances, the owner and the contractor must approve each other's selection, but this is not always the case. Normally, however, neither the owner nor the contractor has any direct control over the selection of the third member. By including the contractor in the selection process, the problem of partiality is eliminated.

2.2 Claims

For the purpose of this research, the term claim was defined as a dispute which resulted in a lawsuit because the IDOH and the contractor were unable to reach a settlement using the IDOH's dispute resolution process. A dispute which is left unresolved by the current resolution process, but is also not pursued in a court of law is not considered to be a claim. For a dispute to be a claim, the contractor must pursue resolution beyond the bounds of the IDOH's

current dispute resolution system.

Because claims were once disputes, the different types of disputes that were explained in the preceding section also apply to claims. The less serious disputes are solved before they became claims, but any dispute has the potential to become a claim. Consequently, the basic descriptions for claims and disputes are virtually identical, except for their degree of seriousness and handling requirements.

2.2.1 Litigation

One common method for resolving claims is litigation. This method is a formal process, and is the traditional resolution procedure used by most organizations. Other methods have gained in popularity, but litigation is still used by the majority of people to settle claims.

Litigation is initiated when one party having a claim against a second party, files suit in a court of law. When the case comes to trial a formal procedure begins. "Opening statements are made; witnesses are called, examined, and cross-examined; and other evidence is presented."(6,p.238) Strict rules of evidence apply in a court of law; so parties involved are somewhat limited as to what they can present as evidence. The judge makes the final decision on what is and is not admissible evidence. "Once each side has presented its case, the other side has the option of moving for a directed verdict which, if made, must be considered by the court."(6,p.238) If the court denies the motion, closing

arguments are made to the jury, and the jury then receives its instructions from the judge. After deliberation, the jury returns with a verdict.(6)

Once the verdict has been reached, the losing side may request a new trial for several reasons ". . . such as improper rulings on evidence, jury misconduct, an error in the judge's instructions or excessive damages." (6,p.239) If the court has not formally entered a judgement yet, the losing side can also challenge the verdict by saying ". . . that the jury's verdict was wrong in light of the evidence presented on the applicable principles of law."(6,p.239)

Providing that all post-trial motions fail, judgement can then be entered for the prevailing party. In order to contest the settlement, the losing party must then file for an appeal. The appeals court will examine the trial records; the transcripts; and the pleadings, the testimony, and the briefs of each party. Oral arguments are normally heard, and the judges then render a majority decision. The case may be referred back to a trial court if it is reversed, or if the decision is upheld, the case may be appealed to a higher court.(6)

Litigation can take an enormous amount of time because of the backlog of cases currently in the legal system.(6) However, once a trial begins, it normally continues until a verdict is rendered or an out of court settlement is made. Nevertheless, litigation is not a swift method of resolution.

In addition, litigation can be very costly.(6) Legal representation is practically mandatory, and the amount of time that legal counsel must be retained can be enormous. The time that each party must invest in the preparation of depositions, evidence, and other testimony can be very costly as well. Moreover, the taxpayers are sometimes burdened by the cost because the court can be tied up for a long period of time on one case.

Presenting the case itself can sometimes be a problem because in a courtroom situation, it is likely that neither the judge nor the jury will have any experience or knowledge of construction practices.(6) Not only must the case be presented in a clear, concise manner, but it must also be delivered in such a way that someone with no construction background can understand the facts. This can be an even bigger handicap if the case is complex.

In addition, litigation can create problems for one or both of the parties because of the location of the proceedings.(6) The location of the trial may or may not be convenient, and this can drive up the costs. In addition, one party may feel the location of the trial is not neutral and favors the other party. If a change of venue can be obtained, however, this problem can be eliminated.

Strict privacy is unavailable in litigation because the records from a trial are open to the general public. This can serve as both an advantage and a disadvantage. When confidentiality is desired, public records are a

disadvantage. However, public records can be a great advantage because they can serve as precedence by which future disputes will be resolved.

Litigation, by its very nature, encourages the settlement of cases before they go to trial.(6) Extensive discovery allows both parties to assess the opposition's case. ". . . a party can get a witness' story before trial by deposition, and witnesses can be compelled to testify at depositions."(6,p.243) Normally, neither party wishes to go to trial, so once both parties have a better idea of the other party's position, negotiations are much easier to conduct.(6)

In addition, litigation imposes other strict procedural requirements upon both parties.(6) This sometimes produces a less than smooth presentation, but it does provide protection for both parties. For example, rules of evidence prohibit hearsay evidence from being presented. This protects both parties from being unfairly damaged by such evidence. Strict rules of evidence also prevent irrelevant issues from being brought up.

Finally, as was mentioned previously, litigation does provide an appeal process. If one party feels the decision is unacceptable, it can appeal the decision to a higher court. This appeal process can lengthen the resolution process, but it also serves to protect both parties from errors in facts and law.(6)

2.2.2 Arbitration

The second method for resolving claims is arbitration. This method is also a formal process, but the atmosphere is more relaxed than that of a courtroom.(3) It is a less traditional approach to claim settlement, although it has gained in popularity as a valid resolution process. There are Indiana Statutes which allow the use of arbitration, but none apply directly to the IDOH. In general, however, arbitration can be done with or without the assistance of an organization like the American Arbitration Association.

Arbitration can be initiated through the American Arbitration Association (AAA) in two ways. To initiate arbitration under a contract provision, the complaining party must notify the second party of an intent to arbitrate. The notice must ". . . contain a statement setting forth the nature of the dispute, the amount involved, and the remedy sought."(1,p.6) The complaining party must also file the above notice with the AAA, along with " . . . the arbitration provisions of the contract and the appropriate filing fee . . ."(1,p.6) Upon receipt of this information, the AAA notifies the second party of the filing. The second party then has seven days in which to file a statement answering the demand for arbitration. Additional claims and counterclaims may be filed until an arbitrator has been appointed, but ". . . after the arbitrator is appointed, no new or different claim or counterclaim may be submitted without the arbitrator's consent."(1,p.7)

In order to initiate arbitration under a submission, both parties involved must agree to arbitrate under the AAA rules. The agreement to arbitrate must also ". . . contain a statement of the matter in dispute, the amount of money involved, and the remedy sought."(1,p.7) This agreement must be submitted to the AAA, along with the appropriate filing fee.

After arbitration action has been initiated, a prehearing conference is held if the AAA feels that it is necessary or if the parties involved request it. The primary purpose of this conference is ". . . to discuss procedural concerns such as the composition of the panel, scheduling, specification of uncontested facts, witness lists, documents exchange, on site inspections, stenographic records, interpreters, and other matters of concern to the parties." (2,p.5) Because this conference is not mandatory, discovery does not always take place in arbitration cases.

The next phase in the arbitration process involves the selection of the arbitrator. The arbitrator is appointed by the AAA or by the parties involved in the claim. If the AAA is appointing the arbitrator, it sends a list of qualified people to both parties for approval. All acceptable names are ranked in order of preference and all unacceptable names are crossed out. The AAA interprets the failure to return the list in seven days as an acceptance of all names on the list. From a comparison of the two lists, the AAA appoints a mutually accepted arbitrator. If no mutually acceptable

choice exists, the AAA has the power to choose someone not on the list to serve as the arbitrator. Only one arbitrator is appointed unless the AAA feels that it is necessary to appoint more (1)

When the parties involved are appointing the arbitrator, the AAA tries to be as flexible as possible. "If the agreement of the parties names an arbitrator or specifies a method of appointing an arbitrator, that designation or method shall be followed."(1,p.8) The parties must send to the AAA a notice that includes the arbitrator's name and address. When the agreement between the parties specifies that an arbitrator must be chosen within a certain period of time, and no arbitrator has been chosen, the AAA will make the appointment. When the agreement has no time limit, the AAA will make the appointment if no arbitrator has been chosen after seven days.(1)

In some cases, the parties involved may choose to use three arbitrators. Typically, each party selects one arbitrator, and these two select the third. If there is a time limit for selecting the third arbitrator and one has not been appointed, the AAA will step in and appoint someone. The AAA will also appoint the third arbitrator when no time limit exists. If no one has been selected within seven days after the appointment of the last party appointed arbitrator, the AAA will appoint the third arbitrator.(1)

Once an arbitrator(s) has been chosen, the hearings begin at a mutually agreeable time and place. The

proceedings are conducted in a business-like manner, but they are less formal than a court of law. Normally, the complaining party presents its case, and then the defense of the second party follows. However, this order of presentation can be reversed or altered by the arbitrator at his discretion. "Each party must try to convince the arbitrator of the correctness of its position and the hearing is not closed until each has had a full opportunity to present its case."(2,p.5)

Parties may offer any evidence they desire, but the arbitrator has the final word on whether or not a piece of evidence is admissible. The arbitrator also has the power to ask the parties for additional evidence if he feels it is necessary. In addition, many states authorize arbitrators to subpoena both witnesses and documents.(1)

The hearings are closed after both parties indicate that they have no further evidence or witnesses to present. However, the hearings can be reopened by the arbitrator or upon the request of either party prior to the award.(1)

Awards are to be made in writing within thirty (30) days after the close of the hearings. A majority decision or a unanimous decision is required when more than one arbitrator is involved. "The arbitrator may grant any remedy or relief which is just and equitable and within the terms of the agreement of the parties."(1,p.15) However, the ". . . arbitrator need not give reasons for his award." (5,p.9)

Of course, arbitration can be done without the use of AAA's rules and procedures. There are Indiana Statutes which address the issue of arbitration and provide guidelines as to what is permitted. Because the Indiana Statutes do not differ substantially from the AAA's rules, no further discussion of the Indiana Statutes will be done. It would be advisable, however, for anyone developing their own arbitration rules to consult the Indiana Statutes to insure that what they are writing is in compliance with Indiana law.

In most cases, regardless of the arbitration rules used, the award is final. "Arbitration is meant to be a final determination of a dispute. The parties are bound by the award and will be prevented from relitigating the issues."(5,p.10) Under special circumstances, however, an arbitration award can be appealed.

The scope of judicial review of an arbitration award is limited to defects in the arbitration procedure. . . . Valid grounds for upsetting an award are (1) when the award was procured by corruption, fraud, or undue means; (2) if there was evident partiality by the arbitrator; (3) if the arbitrator acted in excess of his powers; or (4) if there were actions which substantially prejudiced one of the parties.(5,p.9)

The amount of time involved in settling a claim by arbitration varies. The first hearing may be scheduled relatively soon after the case is submitted to arbitration, but there is no guarantee that the settlement will be expeditious. "Where the issues in conflict are simple, and the amounts in dispute small, it is likely that the arbitration

and its deposition will occur fairly rapidly."(6,p.241) However, when the claim is complex and requires several hearings to resolve, scheduling the meetings can become a problem because the " . . . arbitrators are generally business or professional persons who are unable to sit continuously . . ."(6,p.241)

There are a variety of costs involved with arbitration. Initially, there is a filing fee paid to the AAA, which is based on an administrative fee schedule. Each side shall pay for its own witnesses, and if a stenographic record is kept, the cost shall be split equally by both parties unless otherwise agreed. The arbitrator's expenses shall be shared by both parties as well.(1) Although it is not uncommon for an arbitrator to serve the first two days at no charge, " . . . after spending two days on a case, the arbitrator must be compensated by the parties."(2,p.4) Payment of the arbitrator is not done directly by the parties, but is done through the AAA instead.(1)

When arbitration is done without the AAA's help it saves the parties a filing fee, but the actual arbitration expenses will still be incurred. Excluding the AAA from the process of screening and selecting the arbitrator does not necessarily save money. "Inexpensive arbitrators generally are inexperienced and are not good. Good arbitrators cost money."(3,p.122)

A major criticism of arbitration is that it does not encourage settlement prior to the hearing. Discovery is not

mandatory and when used, is usually not as extensive as that done in litigation. Consequently, the parties involved are not fully aware of their opponents case, and feel little or no pressure to settle. In addition, this lack of information discourages negotiation because it is rather difficult for the two parties to negotiate when they are unsure of the other's position.

In addition, arbitration, as was previously explained, typically provides virtually no opportunity for appeal. This shortens the amount of time necessary to resolve a claim, but it also gives the arbitration panel a great deal of power, and undermines some people's faith in arbitration.(6)

Another issue that is encountered by parties in an arbitration hearing involves the loose procedural rules used. As stated previously, rules of evidence do not apply. Any evidence can be brought before an arbitration panel, including hearsay evidence. It is possible that one or both parties' cases could be damaged by the introduction of such evidence. In addition, more evidence is typically submitted at arbitration hearings, and this can lengthen the proceedings unnecessarily. On the other hand, this lack of restriction does permit a smoother presentation of the facts to be made.(6)

In addition to looser procedural rules, arbitration also allows for the hearing to be held at a mutually agreeable location. This normally serves as an advantage to both

parties, providing of course, that an agreement on the location can be reached quickly.

An aspect of arbitration which can be both beneficial and detrimental to both parties is the privacy it provides. Arbitration proceedings' records are not open to public inspection and cannot be used as the basis for setting a precedence. This is advantageous if confidentiality is desirable, but disadvantageous if a party wishes to set a precedence for future cases.

And finally, an important advantage of arbitration is the expertise of the arbitration panel.

In construction cases, the arbitrators generally are in the construction industry and can draw on their technical expertise, personal experience, and a familiarity with industry customs in reaching a decision. Arbitrators with technical expertise should also be able to narrow issues, clarify points and ask intelligent questions. At trials, a judge or jury will likely have no construction expertise and juries are generally not permitted to ask questions of witnesses.(6,p.242)

CHAPTER 3

THE CURRENT IDOH RESOLUTION PROCESS

Disputes originate primarily at the job site, so it is logical that dispute resolution should begin at the project level also. But, because it is unlikely that all disputes will be resolved at the project level, it is necessary to extend the resolution process beyond the job site. The IDOH resolution process, for example, has three main levels of authority beyond the project level. These three levels; the district office level, the central office level, and the courts; combine with the project level to act as a framework for the IDOH resolution process. It is the purpose of the following chapter to elaborate on these four levels in order to more fully explain the current resolution process of the IDOH. A summary of the IDOH resolution process has been illustrated in Figure 1 on page 44.

3.1 The Project Level

Many disputes begin as verbal discussions between the Contractor and the Project Supervisor. It is sometimes possible to resolve a dispute in this manner, but when a verbal discussion proves ineffective, the Contractor must submit a formal request to the Project Supervisor. This request is

typically a written statement containing an explanation of the Contractor's position along with supporting evidence and calculations. The Project Supervisor examines this statement, and when necessary, requests additional information from the Contractor. After consulting his daily log, and any pertinent contract documents, the Project Supervisor then evaluates the Contractor's request.

At this point the dispute is either resolved or sent to the District Office for review. If a dispute does not involve a request for design changes, additional payments, or time extensions, and the Contractor is satisfied with the Project Supervisor's decision, the dispute is resolved. If, however, the dispute involves any of these three requests, or if the Contractor is dissatisfied with the Project Supervisor's decision, the dispute is normally sent to the District Office for review. Whenever design changes, additional payments, or time extensions are involved, departmental policy requires that the dispute be sent to the District Office. However, if the Contractor is dissatisfied with the Project Supervisor's decision, the District Office receives the dispute only if and when the Contractor requests that the Project Supervisor's decision be altered or reversed.

The two primary reasons why disputes are not solved at the project level are the personnel involved and the nature of the dispute. The first reason, the personnel involved, relates to the fact that the IDOH and the Contractor must work together to resolve a dispute. When personalities

clash, it is difficult to come to a mutual understanding, and disputes are not easily solved. The second reason, the nature of the dispute, involves the policies which require that certain types of disputes be resolved at levels higher than the project level. As was stated earlier, any disputes which include requests for additional payment, time extensions, or design changes cannot be solved at the project level. Discussions and negotiations are permitted at the project level, but the final decision must come from either the District or the Central Office.

3.2 The District Office Level

Disputes which are not resolved at the project level are sent to the District Office. Depending upon the nature of the dispute, the IDOH or the Contractor may initiate the action. When departmental policy requires that the dispute be sent to the District Office, the Project Supervisor forwards his findings and the Contractor's statement to the Area Engineer. If, however, the Contractor is appealing the decision made at the project level, the Contractor must send his appeal to the Area Engineer in the District Office. The Area Engineer, upon receiving the Contractor's statement, then obtains the Project Supervisor's recommendations.

The Area Engineer reviews the Contractor's statement and the Project Supervisor's findings and requests additional information as needed. The Area Engineer also reviews any pertinent contract documents, and in some cases

he may seek advice from other IDOH personnel who have encountered similar disputes. After examining all of the available information, the Area Engineer then assesses the Contractor's request.

The Area Engineer's decision will either resolve the dispute, or the dispute will be given to the Construction Engineer of the District for his review. Basically, the same rules apply to the Area Engineer as applied to the Project Supervisor. Before a dispute can be resolved by the Area Engineer the dispute cannot involve a request for an additional payment, a time extension, or a design change, and the Contractor must abide by the Area Engineer's decision. If a dispute involves any of these three requests, or if the Contractor asks that the Area Engineer's decision be changed, the Construction Engineer then reviews the dispute.

The Construction Engineer's review process is like that of the Area Engineer and the Project Supervisor. He reviews the statements of the Contractor, the Project Supervisor, and the Area Engineer, and requests additional information, if necessary. The Construction Engineer may also consult other IDOH personnel, or he may even elect to call an informal meeting between the parties involved in the dispute. From all the information he gathers, the Construction Engineer then evaluates the Contractor's request.

As with the Area Engineer and the Project Supervisor, the Construction Engineer's decision may or may not resolve the dispute. For a dispute to be resolved, regardless of

its nature, the Contractor must agree to the decision. If the Contractor does not agree, he has the right to appeal the decision to the Central Office. In addition, the dispute cannot involve time extensions or design changes. Again, departmental policy requires that disputes involving either of these items be sent to the Central Office. However, the Construction Engineer does have limited authority to resolve disputes which involve additional payments. The limits are \$10,000 per line item on changed work and \$7,000 per line item on new work. Disputes which exceed these limits must be sent to the Central Office for review.

Disputes are not resolved at the district level for the same reasons they are not solved at the project level; the personnel involved and the nature of the dispute. Even more people become involved in a dispute when it reaches the district level, and the more people involved, the longer it will take to reach an agreement. This can make reaching a mutual understanding more difficult. Also, because of departmental policy, the resolution of a dispute is influenced by the nature of the dispute. Departmental policy does not allow the district level to resolve disputes involving time extensions or design changes, but the district level does have the authority to resolve disputes involving additional payment. This gives the district level more authority than the project level, and it increases the number of disputes which have the potential to be resolved before they reach the Central Office.

3.3 The Central Office Level

When a dispute is not resolved at the District Office, it is sent to the Central Office for a final set of reviews. If departmental policy requires that the dispute be sent to the Central Office, the Construction Engineer forwards his, the Area Engineer's, and the Project Supervisor's recommendations and the Contractor's statement to one of five field construction engineers. When the Contractor is appealing the District Office's decision, however, the review process begins once he sends an appeal to the Field Construction Engineer. The Field Construction Engineer then contacts the District Office in order to obtain the necessary recommendations.

The Field Construction Engineer reviews the Contractor's statement and all of the recommendations from IDOH personnel. Additional information is acquired, if needed, and consultation with other IDOH personnel may take place as well. The Field Construction Engineer's recommendation is then added to that of the other IDOH personnel, and the dispute is forwarded to the Engineer of Construction for his review.

The Engineer of Construction's review process is like that of the Field Construction Engineer's. Recommendations from IDOH personnel are read, the Contractor's request is examined, and additional information is gathered, as necessary. The Engineer of Construction may also discuss the dispute with other IDOH personnel in the Central Office. If

the dispute involves a time extension, a design change, an additional payment for new work exceeding \$12,000 per line item; or an additional payment for changed work exceeding \$20,000 per line item, the Engineer of Construction adds his recommendation and sends the dispute to the Chief Engineer of the Construction Division for his review. If, however, the dispute does not involve any of these four (4) items, the Engineer of Construction has the authority to issue a decision to the Contractor. The Contractor, if dissatisfied, can then appeal this decision to the Chief Engineer of the Construction Division.

The review process of the Chief Engineer of the Construction Division is similar to that of preceding reviews. The recommendations of IDOH personnel are read, and the Contractor's statement is examined. Additional information is gathered and other IDOH personnel are consulted, as needed. If the dispute does not involve a time extension; a design change; an additional payment for new work exceeding \$25,000 per line item; or an additional payment for changed work exceeding \$50,000 per line item, the Chief Engineer of the Construction Division has the authority to render a decision. Any dispute involving any of these four (4) items must be forwarded to the Deputy Director of Operations. However, if the Chief Engineer of the Construction Division has the authority to render a decision, that decision may be appealed to the Deputy Director of Highway Operations.

The Deputy Director of Highway Operation's review process does not differ substantially from the Chief Engineer of the Construction Division's. The primary difference is that the Deputy Director has the authority to render decisions on additional payments for new work not exceeding \$75,000 per line item and changed work not exceeding \$150,000 per line item. Any dispute which requests additional payments that exceed these limits, or that involve time extensions or design changes must be reviewed by the Director of Highways, and any decision made by the Deputy Director may be appealed to the Director.

Finally, if preceding reviews have failed to resolve the dispute, the Director of Highways receives the dispute for his review. The Director has the authority to resolve disputes involving time extensions, design changes, or additional payments. If dissatisfied with the Director's decision, the Contractor may file a lawsuit against the State of Indiana in a court of law.

Disputes are left unresolved at the Central Office level only when the IDOH and the Contractor cannot come to an agreement. The Director has no authority limitations regarding time extensions, design changes, or additional payments, so departmental policy cannot be blamed for the failure to resolve disputes of this nature. The Director has final authority on all disputes, and unless both parties are hopelessly deadlocked, a dispute should be resolved at the Central Office level.

3.4 Litigation

The final level of authority in the IDOH's resolution process is a court of law. The use of litigation signifies the evolution of a dispute into a claim, and this method is utilized only when all other efforts have failed. Presently, all court cases involving the IDOH are heard by a regular court of law ,and there is no alternative, such as arbitration, in the IDOH process. Any appeals to the court decision are made through the appropriate judicial channels. Because a detailed description of the litigation process was done in Chapter Two, no further discussion of the process will be done here.

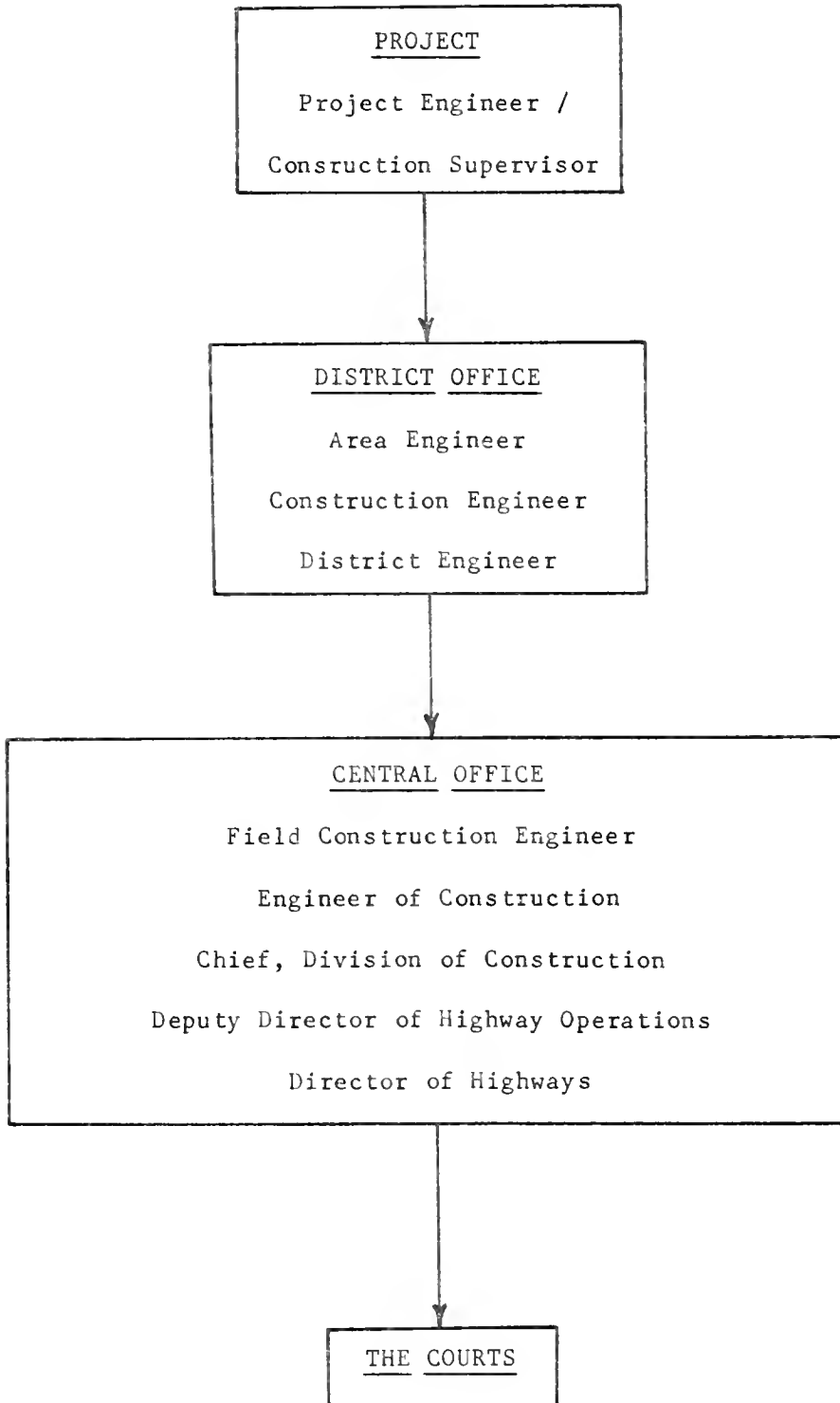


Figure 1 The Current IDOH Resolution Process

CHAPTER 4

RESULTS OF THE SURVEYS

During the course of this study, two surveys were taken; one of IDOH personnel and one of the contracting community. Although each survey contained the five sections: Background Information; Descriptive Analysis of Disputes; Quantitative Analysis of Disputes; The Current System; and Suggestions and Alternatives, a few questions did differ. The survey of the IDOH personnel was sent out to a total of fifty-four people and all surveys were returned completed. The survey of the highway contractors was sent out to thirty contractors and twelve surveys were returned completed. Another four surveys were returned uncompleted because the contractors indicated that they did not feel qualified to participate in the study. There was no response from the other fourteen contractors.

The first section in the chapter was intended to summarize the results of both surveys. Sections two and three represent the results of each survey in their entirety. The results of the questions in the survey are presented in one of three different forms. For the questions where several choices were offered but only one response was requested, the percentage of responses for each choice is recorded.

When a question required the ranking of choices, the average of all of the responses for each choice is recorded. Some questions required a short written answer, and those answers are simply listed below the question. Unless otherwise noted, the IDOH survey results are based on the responses of six construction engineers, eighteen area engineers, and thirty project supervisors. Also, unless otherwise noted, the survey results of the contractors are based on twelve responses.

4.1 Summary of Surveys

4.1.1 The IDOH Survey

It was revealed in the IDOH survey that most of the respondents had at least five years experience in their present position, and all of them had at least five years experience working for the IDOH in some capacity.

The three most common disputes listed were time extensions, the interpretation of specifications, and changed work. The least common dispute seemed to be over precedence set by other districts. It was felt that the two types of disputes most commonly solved at the district office were quantity disagreements and construction quality disputes. Time extensions and material rejections seemed to be the two types of disputes most commonly solved at the Central Office. As far as common factors are concerned, the three mentioned the most were out-of-state contractors, the rainy season, and the fall of the year.

Most respondents felt that disputes had changed over the years. It was noted by several that the number of disputes has increased. Some suggested that more disputes are now over time extensions, and others indicated that they felt more disputes are now going to the Central Office. The primary trend predicted by the respondents was that the number of disputes will continue to increase.

Many of the construction engineers indicated that they encountered ten to fifteen disputes per week, while both the area engineers and the project supervisors generally felt that they dealt with only zero to five disputes weekly. There seemed to be no solid agreement on the most frequent price range of disputes; the number of hours spent per dispute; or the percentage of disputes the respondent was able to solve.

Both project supervisors and area engineers felt that decisions were sometimes rendered in a timely manner from the Central Office. Construction engineers indicated that timely decisions were usually rendered by the Central Office. Almost all respondents felt that contractors at least sometimes skipped their level of authority. When questioned about the current relationship between the IDOH and the contracting community, most indicated that they perceived the relationship to be fair to good. Most said they would not change the present resolution system. However, of those who suggested change, many indicated that they would give more authority to the districts.

The reaction to both binding arbitration and an in-house committee were mixed. Some were definitely against the idea of either suggestion, while others were willing to try one or both of these methods.

4.1.2 The Contractor Survey

It was learned from the contractor survey that most of the respondents have worked for the IDOH for at least twenty years. In addition, most of them have done the majority of their work in the bottom two thirds of the State.

Changed work, the interpretation of specifications, and errors in the plans were listed as the three most common disputes encountered. The least common disputes were over delays by the contractor and construction quality. The disputes which contractors felt were most often solved at the district level were over construction quality and quantity disagreements. Time extensions and changed work were the two types of disputes that, according to the contractors, were usually solved at the Central Office. The three most common factors listed were: the rainy season; the highway personnel at the job site; and the highway personnel at the Central Office.

The contractors were split on the question concerning whether or not disputes have changed. The respondents which felt disputes had changed indicated that: disputes are more frequent now; errors in the plans have become more common; and decisions are made slower. Most felt that there were

definite trends forming. The contractors predicted that the number of disputes would increase; especially those involving changed conditions and liquidated damages.

Most contractors reported that they handled approximately zero to five disputes per week. Just as with the IDOH survey, there was no agreement on the most frequent price range; the number of hours spent; or the percentage of disputes solved by the respondents.

It was felt that decisions are rarely to sometimes given in a timely manner from the Central Office. The District Offices were rated little better; they received a 'sometimes' rating on the speed of their decisions. Although the relationship between the IDOH and the contractors was rated as fair to good, some contractors still had suggestions for improvement. For example, it was suggested that more decisions should be made at the district level. When asked why Indiana contractors tend not to sue the IDOH, contractors listed the following three reasons: the cost; the time involved; and the fear of reprisal.

The response to binding arbitration was mixed, as was the reaction to an in-house committee. However, more contractors were in favor of the in-house committee than arbitration.

4.2 The IDOH Survey Results

The following symbols will be used to classify and record the responses to the following survey:

C ~ Construction Engineer

A ~ Area Engineer

P ~ Project Supervisor

4.2.1 Background Information

- 1) What is your present position with the Indiana Dept. of Highways?

(6) Construction Engineer

(18) Area Engineer

(30) Project Supervisor

- 2) How many years have you been in your present position?

() 0 ~ 1

() 5 ~ 10

() 15 ~ 20

C: 0.0%

33.3%

0.0%

A: 5.5%

55.6%

5.5%

P: 0.0%

40.0%

20.0%

() 1 ~ 5

() 10 ~ 15

() 20 +

C: 16.7%

50.0%

0.0%

A: 5.5%

27.8%

0.0%

P: 0.0%

30.0%

10.0%

- 3) How many years have you been employed by the Indiana Dept. of Highways?

() 0 ~ 1 () 5 ~ 10 () 15 ~ 20

C: 0.0% 0.0% 0.0%
 A: 0.0% 0.0% 11.1%
 P: 0.0% 26.7% 20.0%

() 1 ~ 5 () 10 ~ 15 () 20 +

C: 0.0% 0.0% 100.0%
 A: 0.0% 11.1% 77.8%
 P: 0.0% 30.0% 23.3%

- 4) Please estimate the number of jobs that you have worked on in each category while in your present position.

RS ~ resurface

C: 59 (range: 20 ~ 125)
 A: 48 (range: 2 ~ 90)
 P: 5 (range: 0 ~ 28)

R ~ reconstruct. and/or new work

C: 33 (range: 15 ~ 70)
 A: 36 (range: 5 ~ 150)
 P: 6 (range: 0 ~ 28)

T ~ traffic

C: 49 (range: 10 ~ 100)
 A: 21 (range: 3 ~ 50)
 P: 3 (range: 0 ~ 40)

M ~ maintenance

C: 48 (range: 30 ~ 100)
 A: 24 (range: 2 ~ 95)
 P: 2 (range: 0 ~ 15)

B ~ bridges

C: 107 (range: 80 ~ 175)
 A: 50 (range: 10 ~ 150)
 P: 6 (range: 0 ~ 40)

4.2.2 Descriptive Analysis of Disputes

- 1) Please rank the following disputes: 1=most common, 12=least common

time extensions

C: 2.5
A: 3.7
P: 7.4

precedence set by other dist.

C: 10.7
A: 10.6
P: 9.4

new work

C: 5.3
A: 5.2
P: 9.7

quantity disagreements

C: 7.0
A: 8.3
P: 7.7

changed work

C: 4.7
A: 5.0
P: 5.6

interpretation of the specs

C: 3.7
A: 3.4
P: 2.9

material rejections

C: 6.0
A: 7.2
P: 7.1

errors in the plans

C: 6.2
A: 5.2
P: 5.0

construction quality

C: 6.7
A: 6.8
P: 4.2

omissions in the plans

C: 7.2
A: 4.6
P: 5.1

delays by contractor

C: 8.3
A: 7.9
P: 9.3

delays by state

C: 9.8
A: 7.8
P: 8.5

- 2) Please list any other common disputes that occur.

C: Workday charges
Deviation from the contract proposal

A: Interpretation of the standards
Personality conflicts
Interpretation of the intent of the plans

Interpretation as to what is covered by an
 item in a contract
 Unauthorized IDOH personnel giving consent
 to a contractor to do work
 Traffic control

P: Workmanship
 Personality conflicts
 Traffic control
 Adjacent property owners
 Utility problems
 Relations with cities
 Subcontractors
 Test results (compaction tests)
 Quality and quantity of contractor's personnel and equipment

- 3) Typically, are some types of disputes usually solved at the district level, while others seem to consistently end up at the central office for review?

() yes

() no

C: 100.0%

0.0%

A: 100.0%

0.0%

P: 86.7%

13.3%

- 4) If so, please rank the following types of disputes from 1 to 12, with: 1=almost always solved at the district level, 12=almost always sent to the central office.

If a dispute listed below does not apply, place an X in its blank, and if there are other disputes not listed that are applicable, please add them to the bottom of the list.

time extensions

precedence set by other dist.

C: 11.8

C: 3.6

A: 10.9

A: 4.1

P: 10.5

P: 4.9

new work

quantity disagreements

C: 7.8

C: 2.8

A: 7.4

A: 3.2

P: 8.4

P: 3.3

changed work

C: 8.5
A: 4.4
P: 6.7

interpretation of the specs

C: 7.3
A: 5.9
P: 4.8

material rejections

C: 8.8
A: 7.9
P: 8.4

errors in the plans

C: 5.7
A: 7.2
P: 7.4

construction quality

C: 3.2
A: 3.3
P: 1.6

omissions in the plans

C: 5.7
A: 7.5
P: 8.4

delays by contractors

C: 7.0
A: 6.6
P: 5.6

delays by state

C: 7.4
A: 6.4
P: 7.4

NOTE: Did not receive 30 responses from the project supervisors. The number of responses received ranged from 26 to 28.

· Liquidated damages was listed by one individual and was given a ranking of 6.

- 5) Please evaluate the following factors with respect to how frequently they tend to be associated with disputes.

1=quite often
2=fairly often
3=seldom

instate contractors

C: 2.2
A: 2.1
P: 2.5

rainy season

C: 1.7
A: 1.8
P: 1.8

out-of-state contractors

C: 1.2
A: 1.6
P: 1.8

dry season

C: 3.0
A: 2.9
P: 2.7

| | |
|-----------------------------|-----------------------|
| fall of the year | type of work |
| C: 1.5 | C: 2.3 |
| A: 1.4 | A: 2.1 |
| P: 2.0 | P: 2.2 |
| spring of the year | new type of work |
| C: 2.2 | C: 1.8 |
| A: 2.6 | A: 2.1 |
| P: 2.5 | P: 1.8 |
| small contractor | number of contractors |
| C: 2.5 | C: 2.5 |
| A: 2.6 | A: 2.2 |
| P: 1.9 | P: 1.8 |
| medium sized contractor | size of project |
| C: 2.3 | C: 2.5 |
| A: 2.3 | A: 2.1 |
| P: 2.2 | P: 2.2 |
| large contractor | hwy person'l~job site |
| C: 1.7 | C: 2.7 |
| A: 2.1 | A: 1.8 |
| P: 2.0 | P: 2.1 |
| field personnel~contractor | hwy person'l~dist off |
| C: 2.3 | C: 2.8 |
| A: 1.9 | A: 2.1 |
| P: 1.9 | P: 2.4 |
| office personnel~contractor | hwy person'l~cent off |
| C: 2.8 | C: 2.8 |
| A: 2.6 | A: 2.4 |
| P: 2.3 | P: 2.4 |

6) Please list any other common factors that seem to exist among disputes.

C: Interpretation of the specifications

A: Interpretation of the specifications

Intent of the plans unclear

90% of all central office disputes come from

10% of the contractors

P: Interpretation of the specifications
 Contractor's experience
 Personality conflicts
 Very low profit bids
 Newly changed specifications and standards

7) Have disputes changed over the years?

() yes

() no

C: 83.3%

16.7%

A: 61.1%

38.9%

P: 33.3%

66.7%

8) If so, please elaborate.

C: The number of claims for additional payment has increased.

There will be more time extension requests because the time limits on contracts are tighter.
 More claims are going all the way to the director.

A: The number of claims has increased.

More disputes used to be solved in the field.
 Disputes used to be about methods and quantities; now they tend to be about time extensions.

P: There are more smaller, everyday type disputes.

More out-of-state contractors are bidding who are not familiar with the specifications.
 There are more disputes over time extensions.
 More disputes going to the central office.

9) Do you see any trends forming with respect to the number and/or types of claims that we may see in the future?

() yes

() no

C: 66.7%

33.3%

A: 50.0%

50.0%

P: 30.0%

70.0%

10) If so, please elaborate.

C: The number of lawsuits will increase.

A: Time extension request will increase.

Interpretation of the specifications is getting more involved.
There will be more lawsuits.

P: The central office is getting more involved with disputes that could be settled in the field.
There will be more lawsuits.
There will be more requests for time extensions.

4.2.3 Quantitative Analysis of Disputes

1) Please indicate how many disputes you are involved with in a typical week.

() 0 ~ 5 () 10 ~ 15 () 20 ~ 30 () 40 ~ 50

| | | | | |
|----|-------|-------|------|------|
| C: | 33.3% | 66.7% | 0.0% | 0.0% |
| A: | 66.7% | 33.3% | 0.0% | 0.0% |
| P: | 66.7% | 3.3% | 0.0% | 0.0% |

() 5 ~ 10 () 15 ~ 20 () 30 ~ 40 () 50 +

| | | | | |
|----|-------|------|------|------|
| C: | 0.0% | 0.0% | 0.0% | 0.0% |
| A: | 0.0% | 0.0% | 0.0% | 0.0% |
| P: | 23.3% | 3.3% | 3.3% | 0.0% |

2) What price range do most of your disputes come in?
1=most frequent, 2=second most frequent, 3=third most frequent

() 1~50 () 500~1000 () 5000~10000 () 20000~50000

| | | | | |
|----|-----|-----|-----|-----|
| C: | 3.0 | 2.5 | 1.4 | 3.0 |
| A: | 2.0 | 1.8 | 2.0 | 2.6 |
| P: | 2.0 | 1.9 | 2.1 | 2.5 |

() 50~500 () 1000~5000 () 10000~20000 () 50000 +

| | | | | |
|----|-----|-----|-----|-----|
| C: | 2.0 | 1.6 | 3.0 | 2.5 |
| A: | 2.7 | 1.6 | 2.3 | 3.0 |
| P: | 1.7 | 1.9 | 2.1 | 2.9 |

- 3) Please indicate how many hours, on the average, that you spend on disputes in a typical week.

| | () 0-1 | () 2-3 | () 4-5 | () 10-15 | () 20-30 |
|----|---------|---------|---------|-----------|-----------|
| C: | 0.0% | 16.7% | 33.3% | 0.0% | 0.0% |
| A: | 0.0% | 5.5% | 22.2% | 22.2% | 0.0% |
| P: | 16.7% | 23.3% | 20.0% | 0.0% | 3.3% |

| | () 1-2 | () 3-4 | () 5-10 | () 15-20 | () 30-40 |
|----|---------|---------|----------|-----------|-----------|
| C: | 16.7% | 0.0% | 16.7% | 16.7% | 0.0% |
| A: | 0.0% | 16.7% | 27.8% | 5.5% | 0.0% |
| P: | 20.0% | 3.3% | 13.3% | 0.0% | 0.0% |

- 4) How many disputes would you estimate that you are able to solve?

| | () 20% | () 50% | () 70% | () 80% | () 90% |
|----|---------|---------|---------|---------|---------|
| C: | 0.0% | 16.7% | 0.0% | 16.7% | 16.7% |
| A: | 16.7% | 22.2% | 5.5% | 16.7% | 0.0% |
| P: | 13.3% | 10.0% | 3.3% | 3.3% | 20.0% |

| | () 40% | () 60% | () 75% | () 85% | () 95% |
|----|---------|---------|---------|---------|---------|
| C: | 0.0% | 16.7% | 16.7% | 0.0% | 16.7% |
| A: | 16.7% | 11.1% | 5.5% | 5.5% | 0.0% |
| P: | 6.7% | 13.3% | 23.3% | 0.0% | 6.7% |

4.2.4 The Current System

- 1) Do you feel that decisions are rendered in a timely manner from the central office?

| | always | usually | sometimes | rarely | never |
|----|--------|---------|-----------|--------|-------|
| C: | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% |
| A: | 0.0% | 27.8% | 55.5% | 16.7% | 0.0% |
| P: | 0.0% | 26.7% | 56.7% | 13.3% | 3.3% |

- 2) How frequently do contractors skip your level of authority and approach your superiors with a dispute?

| | always | usually | sometimes | rarely | never |
|----|--------|---------|-----------|--------|-------|
| C: | 0.0% | 0.0% | 83.3% | 16.7% | 0.0% |
| A: | 0.0% | 0.0% | 88.9% | 11.1% | 0.0% |
| P: | 3.4% | 0.0% | 55.2% | 37.9% | 3.4% |

- 3) How would you evaluate the current relationship between the state highway and the contracting community?

| | excellent | good | fair | poor |
|----|-----------|--------|-------|------|
| C: | 0.0% | 100.0% | 0.0% | 0.0% |
| A: | 1.1% | 72.2% | 16.7% | 0.0% |
| P: | 3.3% | 50.0% | 43.3% | 3.3% |

- 4) Do you have any suggestions on how to improve this relationship?

| | () yes | () no |
|----|---------|--------|
| C: | 50.0% | 50.0% |
| A: | 50.0% | 50.0% |
| P: | 53.3% | 46.6% |

- 5) If so, please elaborate.

C: Tighten up on the prequalification of contractors.
 Allow more time on contracts, especially bridge contracts.
 Allow decisions to be made at the lowest possible level.

A: Answer faster on changes that slow down construction.
 Do not allow the contractor to skip the chain of command.
 Word the specifications more simply.
 Give more authority to the districts.
 Eliminate high dispute contractors by prequalification changes.

P: Give the project supervisor more authority.
 Get the paperwork back quicker from the central office.
 Give the district office more control.
 Update the specifications.
 Take advantage of the contractor's knowledge.
 Pay more attention to the evaluations of contractors.
 Be firm in judgements.

- 6) Would you change the present process of handling disputes at your level?

| | |
|----------|--------|
| () yes | () no |
| C: 33.3% | 66.7% |
| A: 11.1% | 89.9% |
| P: 6.7% | 93.3% |

- 7) If so, please elaborate.

C: Allow the district more flexibility to settle minor time extension disputes.
Require more formal documentation of disputes and resolutions.

A: Give the district office more authority.
Require the contractors to justify extra costs.

P: Give the district office more power.
Consult with the project supervisor on all matters concerning his project.

4.2.5 Suggestions and Alternatives

- 1) How would you react to implementing binding arbitration to replace the current method of litigation as the last attempt to resolve a dispute?

Note: Although no specific categories were given for this question, the responses can be categorized as follows:

| | favorable | somewhat favorable | against | no comment |
|----|-----------|-----------------------|---------|---------------|
| C: | 50.0% | 0.0% | 33.3% | 16.7% |
| A: | 27.8% | 22.2% | 38.9% | 11.1% |
| P: | 36.7% | 13.3% | 33.3% | |

Specific comments:

C: Arbitration will lead to more disputes.

A: Arbitration will take too much time and will lead to more disputes.

P: It would be hard to find an impartial board. Arbitration would be slow to solve everyday disputes.

Arbitration will take too much time and will lead to more disputes.
Arbitration might work on some items but not on all.

- 2) How would you feel about forming an in-house committee to examine disputes as a last resort before either litigation or arbitration?

Note: Although no specific categories were given for this question, the responses can be categorized as follows:

| | favorable | somewhat favorable | against | no comment | in use now |
|----|-----------|--------------------|---------|------------|------------|
| C: | 16.7% | 16.7% | 16.7% | 0.0% | 50.0% |
| A: | 27.8% | 16.7% | 22.2% | 11.1% | 22.2% |
| P: | 20.7% | 10.3% | 34.5% | 17.2% | 17.2% |

(only 17 responses from the area engineers and 29 responses from the project supervisors)

Specific comments:

C: No comments were made.

A: An in-house committee might attract more disputes.

The decision would have to be binding to be effective.

P: An in-house committee would not be impartial. The IDOH has too many committees now.

An in-house committee would only complicate the situation.

The committee would have to be unbiased and not associated with the original problem.

An in-house committee might work if the district and the project personnel were involved in the process.

- 3) Please list all suggestions or recommendations that you have concerning how disputes could be decreased or how they could be handled differently?

C: Simplify the specification terminology.
Avoid deviation from the basic rules.

A: Give the field more authority.
Accept only clear, written claims from the contractor.

Increase the schedule for liquidated damages.
Be firm in decision making.
Hold a few meetings with all concerned parties.

- P: Try to handle the disputes at the job level.
Consult the project supervisor before resolving a dispute on his job.
Require designers to have several years of field experience.
Treat contractors equally.
Reduce the number of people involved with a dispute.
Check the plans more closely for errors and omissions.
Improve the specifications.
Deal with disputes quickly.
Select personnel better so as to eliminate personality conflicts.
Be firm in decision making.

4.3 The Contractor Survey Results

4.3.1 Background Information

- 1) What kind(s) of contracts have you done for the Indiana Department of Highways? Please rank from 1 to 5, with 1=the type of work that you have the most experience in.

NOTE: Did not receive twelve responses on this question. Number of responses ranged from six to nine.

(2.8) RS ~ resurface

(1.8) R ~ reconstruction and/or new work

(3.4) T ~ traffic

(3.0) M ~ maintenance

(2.2) B ~ bridges

- 2) How long have you worked with the Indiana State Highway Department?

(0.0%) 0 ~ 1 (0.0%) 5 ~ 10 (8.3%) 15 ~ 20

(8.3%) 1 ~ 5 (0.0%) 10 ~ 15 (83.3%) 20 +

- 3) Which district(s) have you done work in? 1=most work, 2=second most work, X=no work.

NOTE: Did not receive twelve responses to this question. The number of responses ranged from three to ten.

(5.0) Laporte

(4.0) Ft. Wayne

(3.0) Crawfordsville

(1.6) Greenfield

(2.8) Vincennes

(2.3) Seymour

4.3.2 Descriptive Analysis of Disputes

- 1) Please rank the following disputes: 1=most common, 12=least common

| | |
|----------------------|-------------------------------|
| time extensions | precedence set by other dist. |
| 5.3 | 8.2 |
| new work | quantity disagreements |
| 6.6 | 6.8 |
| changed work | interpretation of the specs |
| 3.6 | 3.8 |
| material rejections | errors in the plans |
| 8.1 | 3.8 |
| construction quality | omissions in the plans |
| 9.1 | 5.2 |
| delays by contractor | delays by state |
| 10.7 | 5.5 |

- 2) Please list any other common disputes that occur.

Interpretation of Maintenance of Traffic
 Decision making at the central office
 The use of common 'maintenance of traffic
 phrases which are not applicable to all
 projects

- 3) Typically, are some types of disputes usually solved at the district level, while others seem to consistently end up at the central office for review?

(83.3%) yes

(16.7%) no

- 4) If so, please rank the following types of disputes from 1 to 12, with: 1=almost always solved at the district level, 12=almost always sent to the central office.

If a dispute listed below does not apply, place an X in its blank, and if there are other disputes not listed that are applicable, please add them to the bottom of the list.

| | |
|----------------------|-------------------------------|
| time extensions | precedence set by other dist. |
| 9.8 | 8.1 |
| new work | quantity disagreements |
| 9.4 | 4.7 |
| changed work | interpretation of the specs |
| 9.7 | 8.3 |
| material rejections | errors in the plans |
| 6.8 | 8.4 |
| construction quality | omissions in the plans |
| 4.7 | 8.5 |
| delays by contractor | delays by state |
| 7.2 | 8.8 |

- 5) Please evaluate the following factors with respect to how frequently they tend to be associated with disputes.

1=quite often
2=fairly often
3=seldom

| | |
|--------------------------|--------------|
| instate contractors | rainy season |
| 2.2 | 1.6 |
| out-of-state contractors | dry season |
| 2.3 | 2.8 |

| | |
|-----------------------------|-----------------------|
| fall of the year | type of work |
| 2.4 | 2.0 |
| spring of the year | new type of work |
| 2.0 | 2.0 |
| small contractor | number of contractors |
| 2.8 | 2.5 |
| medium sized contractor | size of project |
| 2.4 | 2.6 |
| large contractor | hwy person'l~job site |
| 2.3 | 1.8 |
| field personnel~contractor | hwy person'l~dist off |
| 1.8 | 1.9 |
| office personnel~contractor | hwy person'l~cent off |
| 2.9 | 1.8 |

- 6) Please list any other common factors that seem to exist among disputes.

Methods of doing work
Inability of project level people to make decisions

- 7) Have disputes changed over the years?

(54.4%) yes

(45.5%) no

- 8) If so, please elaborate.

Disputes are more frequent.
Plans contain more errors and omissions.
Decisions are made slower now.
There are more disputes over minor items.
All of the power is in the central office.

Contractors know that if they appeal the project supervisor's decision, they have a good chance of winning.

- 9) Do you see any trends forming with respect to the number and/or types of claims that we may see in the future?

(72.7%) yes

(27.3%) no

- 10) If so, please elaborate.

There will be more disputes over changed conditions.

There will be more disputes over liquidated damages.

The number and type of disputes will increase because of the centralization.

Need more realistic schedules, or the number of disputes will increase.

4.3.3 Quantitative Analysis of Disputes

- 1) Please indicate how many disputes you are involved with in a typical week.

| | | | |
|------------|-------------|-------------|-------------|
| () 0 ~ 5 | () 10 ~ 15 | () 20 ~ 30 | () 40 ~ 50 |
| 75.0% | 0.0% | 8.3% | 0.0% |
| () 5 ~ 10 | () 15 ~ 20 | () 30 ~ 40 | () 50 + |
| 16.7% | 0.0% | 0.0% | 0.0% |

- 2) What price range do most of your disputes come in?
1=most frequent, 2=second most frequent, 3=third most frequent

| | | | |
|------------|---------------|-----------------|-----------------|
| () 1-50 | () 500-1000 | () 5000-10000 | () 20000-50000 |
| 3.0 | 1.5 | 1.6 | 2.2 |
| () 50-500 | () 1000-5000 | () 10000-20000 | () 50000 + |
| 2.4 | 2.0 | 1.5 | 3.0 |

- 3) Please indicate how many hours, on the average, that you spend on disputes in a typical week.

| | | | | |
|---------|---------|----------|-----------|-----------|
| () 0-1 | () 2-3 | () 4-5 | () 10-15 | () 20-30 |
| 25.0% | 0.0% | 25.0% | 16.7% | 0.0% |
| () 1-2 | () 3-4 | () 5-10 | () 15-20 | () 30-40 |
| 0.0% | 16.7% | 8.3% | 8.3% | 0.0% |

- 4) How many disputes would you estimate that you are able to solve?

| | | | | |
|---------|---------|---------|---------|---------|
| () 20% | () 50% | () 70% | () 80% | () 90% |
| 8.3% | 0.0% | 0.0% | 16.7% | 0.0% |
| () 40% | () 60% | () 75% | () 85% | () 95% |
| 8.3% | 16.7% | 0.0% | 8.3% | 16.7% |

NOTE: 25% of the responses said 100%

4.3.4 The Current System

- 1) Do you feel that decisions are rendered in a timely manner from the central office?

| | | | | |
|--------|---------|-----------|---------|---------|
| always | usually | sometimes | rarely | never |
| (0.0%) | (16.7%) | (33.3%) | (33.3%) | (16.7%) |

- 2) Do you feel the decisions are rendered in a timely manner from the district office(s)?

| | | | | |
|--------|---------|-----------|---------|--------|
| always | usually | sometimes | rarely | never |
| (0.0%) | (25.0%) | (50.0%) | (16.7%) | (8.3%) |

- 3) How would you evaluate the current relationship between the state highway and the contracting community?

| | | | |
|-----------|---------|---------|---------|
| excellent | good | fair | poor |
| (0.0%) | (41.7%) | (41.7%) | (16.6%) |

- 4) Do you have any suggestions on how to improve this relationship?

(83.3%) yes

(16.7%) no

- 5) If so, please elaborate.

Greater support and delegation for decision making at lower levels within the IDOH ~ decentralize.

Not fit for print.

Go back to common sense.

Eliminate adversary relationship attitude between the IDOH and the contractor.

- 6) Can you offer any explanations as to why Indiana contractors as a whole, do not have a history of filing court claims against the Indiana State Highway Department?

Contractors fear reprisal.

It is difficult to get a case into court against the state.

It takes too much time and costs too much money.

4.3.5 Suggestions and Alternatives

- 1) How would you react to implementing binding arbitration to replace the current method of litigation as the last attempt to resolve a dispute?

Note: Although no specific categories were given for this question, the responses can be categorized as follows:

| favorable | somewhat favorable | against | no comment |
|-----------|-----------------------|---------|---------------|
| 25.0% | 16.7% | 33.3% | 25.0% |

Specific comments:

Do not want to give up the right to sue.
It would take too long.

- 2) How would you feel about forming an in-house committee to examine disputes as a last resort before either litigation or arbitration?

Note: Although no specific categories were given for this question, the responses can be categorized as follows:

| favorable | somewhat favorable | against | no comment | in use now |
|-----------|-----------------------|---------|---------------|---------------|
| 41.7% | 16.7% | 16.7% | 25.0% | 0.0% |

Specific comments:

It might take too long.

- 3) Please list all suggestions or recommendations that you have concerning how disputes could be decreased or how they could be handled differently?

Need better plans and clearer specifications.
Be timely in addressing problems.
Settle as many disputes as possible at the job site.
Set a time limit for settlement.
Establish fair standards for contractors.

CHAPTER 5

ALTERNATE RESOLUTION SYSTEMS

In the course of completing this study a review was conducted of other transportation agency resolution processes. In reviewing alternative resolution processes, the surrounding states of Wisconsin, Ohio, Illinois, and Kentucky were interviewed. Because of their proximity and similar working conditions, it was thought that these states would provide useful examples of alternative resolution processes. In addition, the Federal Highway Administration (FHWA) was contacted concerning any information available on the resolution processes being used by other states. A study entitled Summary of State Laws and Regulations Governing Settlement of Highway Construction Contract Claims and Claims Disputes had recently been completed, so it was possible to obtain a summary of the resolution processes being used throughout the United States. It is the purpose of the following chapter to review and summarize the information that was gathered from the four state interviews and the FHWA study in order to provide an overview of alternative resolution processes.

5.1 Wisconsin Methodology

In many respects the Wisconsin resolution process is similar to that of Indiana's.

All parties involved in a dispute or claim are strongly encouraged to resolve the issue within the terms of the contract and at the project level. Should issues remain unresolved in the field, they should be referred to appropriate District construction staff for review. District staff may consult with Central Office staff and respond accordingly. If parties involved are dissatisfied, further review may be requested. This review would normally be processed through the District Office and referred to the Central Office Chief Construction Engineer. If the issue remains unresolved, an administrative review and determination is made by the Division Administrator. (4,p.94~95)

At this point, however, the Wisconsin Department of Transportation begins to handle its disputes somewhat differently than does the Indiana Department of Highways. If the dispute is left unresolved by the Division Administrator, it

. . . may then be referred to the State Board and subsequently, if desired, a case could be initiated thereafter in the courts; or it may be referred to the Secretary's Office*. The Secretary may render a decision from which further appeal would be to the State Claims Board and subsequently to the courts; or the Secretary may refer the matter to the Transportation Commission whose decision may be appealed to the courts. (4,p.95)

* (refers to the Secretary of Transportation)

During a telephone conversation with the Wisconsin Department of Transportation, they reported an increase in disputes during both 1980 and 1981. However, it was indicated that for unknown reasons, the number of disputes dropped sharply in 1982. Complaints regarding the quality of plans are common in Wisconsin, but to date, no statistical evidence has been found to substantiate those complaints. When questioned about common disputes, the Wisconsin Department of Transportation did not feel that any one particular type of dispute was any more common than another.

5.2 Ohio Methodology

Unlike the State of Indiana, the State of Ohio requires that a contractor notify the Director of the Department of Transportation of all disputes. This notice must be in writing and contain an estimate of all additional costs associated with the dispute. The Director notifies the Central Office's Bureau of Construction and the Bureau then notifies the appropriate District personnel. The District staff monitors the costs and makes recommendations for each dispute. When the Bureau of Construction renders a decision, the District Office notifies the Contractor. If dissatisfied, the Contractor can ask to meet with all parties involved in the dispute. If this meeting fails to resolve the dispute to the Contractor's satisfaction, he must then file a claim with the Court of Claims. Any appeal to the Court of Claims' decision is taken to the Court of Appeals.

From a telephone conversation with the Ohio Department of Transportation it was learned that two of the most common disputes encountered by personnel involve time extensions and the interpretation of specifications and drawings. It was further indicated that the quality of the construction plans could be better. There does not seem to be any increase in court cases in Ohio, according to the Ohio Department of Transportation, but the number of disputes has increased. If this is the case, Ohio's methodology appears to be resolving the additional disputes before they evolve into claims.

5.3 Illinois Methodology

In many respects, the resolution process of the Illinois Department of Transportation resembles that of the Indiana Department of Transportation. The resolution process in Illinois begins with the resident engineer on the job site. If unresolved there, the dispute is sent to the District Office and finally to the Central Office, if necessary. In addition, the authority limitations of the project level and the District Office are approximately the same as Indiana's.

The Illinois and Indiana approaches differ once a dispute evolves into a claim. In Illinois, the contractor must appeal the Central Office's decision to a Court of Claims. This can only be done, however, after all administrative procedures have been exhausted. The Court of Claims

is a panel of three individuals who recommend a settlement, but cannot enforce it. Enforcement must be done by the General Assembly.

During a personal interview with representatives of the Illinois Department of Transportation, it was indicated that disputes have increased in the past few years, probably as a direct result of the economy. In addition, Illinois has nine districts within its state, and shares Indiana's concern over district uniformity. It was also reported that Illinois has successfully incorporated a "payment for accelerated work" clause into its contracts. They report no deterioration in the quality of the contractors' work, and feel that using the clause has reduced tension between the Illinois Department of Transportation and the contracting community.

5.4 Kentucky Methodology

Of the four surrounding states that were examined, the Commonwealth of Kentucky has the most unique resolution process. Just recently instituted, the resolution process had not been formally used as of the first interview with the Kentucky Department of Transportation. Basically, the new process abolished the traditional chain of command approach that was previously used. Under the new process a dispute is reported to the Resident Engineer on the job site by the Contractor, and the Resident Engineer relays it directly to a five man committee in the Central Office; the Construction

Division is bypassed entirely. The five man committee, with one representative from the Construction Division, reviews the dispute and renders a decision. All appeals must be made to the courts.

Approximately eleven months after the initial interview, a follow-up telephone call was made to the Kentucky Department of Transportation. The entire Department had been experiencing changes since the first interview, so it was not possible to obtain an evaluation of the new resolution system. The Department did feel, however, that since the first interview the number of disputes had increased. The enormous amount of change that is taking place throughout the department was credited for causing at least a portion of that increase. In addition, it was learned that the Commonwealth of Kentucky is divided into twelve (12) districts, and its Department of Transportation is more decentralized than that of Indiana's. Consequently, Kentucky shares Indiana's concern over district uniformity.

5.5 The FHWA Study

The FHWA Study, entitled Summary of State Laws and Regulations Governing Settlement of Highway Construction Claims and Claim Disputes, provided a comprehensive summary of the resolution processes being used by all fifty states and the District of Columbia. The description of each state's resolution process included a review of its administrative remedies and procedures; its special adjudicative

remedies and procedures; and its judicial remedies and procedures. In addition, the FHWA study contained a useful fifteen (15) page table which summarized the description of all fifty states' resolution processes.

The FHWA Study classified resolution processes as either arbitration or litigation, but it did not distinguish between resolution by: chain of command; internal committee; and external committee. Because this study does distinguish between the three resolution processes, it was necessary to classify the resolution processes of the fifty states accordingly. For the purposes of this study, resolution by chain of command was defined to be: a resolution process in which a dispute is submitted to an individual at a low level of authority and is routed through successively higher levels of authority until either the dispute is resolved or the final level of authority is reached. A resolution process which involves a committee or group of individuals from within a state's governing body was considered to be resolution by internal committee. Resolution by external committee also involves a committee or group of individuals, but unlike an internal committee, an external committee is comprised of people that are from both inside and outside the state's governing body.

From these definitions, the resolution processes of the fifty states were classified accordingly. With respect to resolution by chain of command, it was found that all but six states use this resolution process in some form. The

six states which do not use chain of command are: Kentucky, Missouri, Nevada, New Jersey, New Mexico, and Ohio. Of the forty-four states which do use resolution by chain of command, twenty-four also use committees, either internal or external, in their resolution process. These twenty-four states are: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Idaho, Maryland, Massachusetts, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Wyoming,

In total, thirty states use committees in their resolution process, and of these thirty states, seven use two committees. The five states of Alaska, Idaho, Massachusetts, Rhode Island, and Vermont, use two internal committees in their resolution process, while Alabama and Oklahoma use both an internal committee and an external committee. Of the twenty-three states that use one committee, the nineteen states of Arizona, Connecticut, Delaware, Kentucky, Maryland, Missouri, Nevada, New Jersey, New Mexico, Ohio, Oregon, South Carolina, South Dakota, Tennessee, Texas, Utah, Washington, Wisconsin, and Wyoming use an internal committee. The four states of Arkansas, California, Colorado, and Pennsylvania use an external committee.

The power given to the committees varies. Some committees serve in an advisory capacity only, while others are given the power to render binding decisions. Of the twenty-six states that use an internal committee, the states

of Alabama, Arizona, Missouri, Nevada, Oregon, South Dakota, and Texas use their internal committee in an advisory capacity only. The eighteen states of: Connecticut, Delaware, Idaho, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, Ohio, Oklahoma, Rhode Island, South Carolina, Tennessee, Utah, Vermont, Washington, Wisconsin, and Wyoming have internal committees which act as decision-making bodies. Only Alaska, which as stated earlier has two internal committees, uses one committee as an advisory panel and the second as a decision-making body. Of the six states which use an external committee, the states of: Alabama, California, Colorado, and Oklahoma use their committee in an advisory capacity only. The states of Arkansas and Pennsylvania, however, gave their external committees decision-making power.

As was stated earlier, the FHWA study did distinguish between arbitration and litigation. With respect to arbitration, the nine states of California, Delaware, Florida, Iowa, Kansas, Mississippi, Missouri, North Dakota, and Rhode Island all allow arbitration, although Missouri has not included an arbitration clause in any of its contracts as of yet. Only the states of California and Delaware require arbitration; the other seven states do not. As far as litigation is concerned, the three states of Alabama, Arkansas, and Maine are immune from suit. California and Delaware, because they require arbitration, do not include litigation in their resolution process, either. All other states,

however, use litigation in their resolution process.

In comparing the other forty-nine states with that of Indiana, there are nineteen states which, like Indiana, use no committees in their resolution process. For fourteen of these states, that is where the similarity ends. However, the five remaining states of Georgia, Hawaii, Louisiana, Nevada, and New Hampshire do have resolution processes similar to that of Indiana's.

A one page summary of the FHWA Study has been provided on Table 1.

Table 1 Summary of FHWA Study

| Chain of Command | Internal Committee | External Committee | Litigation | Arbitration |
|--|--|---------------------------|---|--|
| AL, AK, AZ, AR, CA, CO, CN, DE, FL, GA, HI, ID, IL, IN, IA, KS, LA, ME, MD, MA, MI, MN, MS, MT, NB, NH, NY, NC, ND, OK, OR, PA, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY | AL, AK, AZ, CN, DE, ID, KY, MD, MA, MO, NV, NJ, NM, OH, OK, OR, RI, SC, SD, TN, TX, UT, VT, WA, WI, WY | AL, AR, CA, CO, OK, PA | AK, AZ, CO, CN, FL, GA, HI, ID, IL, IN, IA, LA, KS, KY, MD, MA, MI, MN, MS, MO, MT, NB, NY, NC, NJ, NM, NY, NC, ND, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY | CA, DE, FL, IA, KS, MS, MD, ND, RI |

CHAPTER 6

SUMMARY AND RECOMMENDATIONS

The primary goal of this study was to investigate the present dispute resolution process of the Indiana Department of Highways, and to propose changes in the process which will reduce the number of disputes which evolve into formal claims and result in litigation. The previous chapters of this study have centered on the first phase of this goal, the investigation of the resolution process. It is, therefore, the purpose of this chapter to provide a brief summary of this investigation, and to present a set of recommendations for improving the current resolution process used by the IDOH.

6.1 Summary

In order to accomplish the primary goal of this study, it was necessary to establish four distinct objectives. The first objective was to compile a list of the most common disputes encountered by the IDOH personnel and to determine what factors, if any, these disputes shared. The second objective was to expand on the knowledge acquired from the first objective in order to identify the current system being used by the IDOH. The third objective utilized the

background information gathered from the first two objectives to evaluate how the disputes are currently being handled. The fourth objective of this research was to recommend guidelines or methods of improving the current system for resolving disputes .

It was first necessary to define the two words, dispute and claim. For the purpose of this research, the term dispute was considered to be a disagreement over any contract provision or provisions which occurred between IDOH personnel and the contractor or his representative. Resolution processes that were found to be characteristic of disputes are resolution by: chain of command; internal committee, and external committee. A claim was defined as a dispute which resulted in a lawsuit because the IDOH and the Contractor were unable to reach a settlement using the IDOH's present resolution process. It was found that the resolution processes typically used to settle claims are litigation and arbitration.

After defining the two terms, dispute and claim, several interviews were then conducted with IDOH personnel. From these interviews, a survey was prepared and distributed to a total of fifty-four district and project level personnel. With assistance from the Indiana Constructors, Inc. interviews and surveys were also conducted of the contracting community. In addition, the four surrounding states of Wisconsin, Ohio, Kentucky, and Illinois were interviewed about their present resolution processes. And finally, the

FHWA provided the researcher with a summary of all fifty states' resolution processes.

From the survey conducted of IDOH personnel, it was found that they perceive the three most common disputes as being over time extension, the interpretation of specifications, and changed work. The three most common factors associated with disputes were listed as: out-of-state contractors, the rainy season, and the fall of the year. Contractors indicated that they believe the three most common disputes to be over changed work, the interpretation of specifications, and errors in the plans. The rainy season; highway personnel at the job site; and highway personnel at the Central Office, were the three most common factors listed by contractors.

Both IDOH personnel and the contractors indicated that the number of disputes have increased in number. In addition, most respondents predicted that this increase would continue. IDOH personnel and the contractors also agreed that their relationship was fair to good. However, the contractors did indicate that they felt the relationship would improve if more decisions could be made at the District Office.

In examining the various methods used to resolve disputes and claims, it was found that a total of forty-four states, including Indiana, use the "chain of command" approach to resolve disputes. Of these forty-four states, twenty-four also use a committee, either internal or

external, to resolve disputes. Forty-five states allow for litigation in their claims resolution process, while three states are immune from prosecution. In total, nine states provide for arbitration, but only two of these require it.

6.2 Recommendations

The information gathered during this study indicated that the number of disputes encountered by IDOH personnel had risen in the past few years. Despite this increase, the IDOH resolution system had maintained a high resolution rate. However, in the course of reviewing the IDOH resolution system, inefficiencies were discovered. The number of disputes is expected to increase in the future, and problems could result because of these inefficiencies. Consequently, it is felt that the inefficiencies should be eliminated now while dispute resolution is not a major problem for the IDOH. In order to assist the IDOH in elimination of these inefficiencies, the following recommendations have been prepared.

I. The FIRST RECOMMENDATION of this study is the development of standard operating policies for the resolution of clear-cut time extension requests at the district level. Initially, this would require identification of the different types of straightforward time extension requests received by the IDOH. Once typical requests are identified, it would then be possible to formulate standard policies for their resolution. It is felt that developing these types of

policies and allowing clear cut time extension requests to be dealt with at a level lower than the Central Office would reduce the number of time extension requests which become disputes.

II. The SECOND RECOMMENDATION of this study is the review of the current monetary limitations which apply to disputes involving new work and changed work. These limitations determine the authority that IDOH personnel have when making decisions. Because it is possible to resolve many disputes at the district level, it is important that these limitations do not unduly restrict the decision-making powers of IDOH personnel at this level. In order not to unduly restrict the district level, it is important that these limitations be reasonable with respect to the nature of the dispute. It is therefore recommended that a review of the current monetary limitations be conducted for possible revisions.

III. The THIRD RECOMMENDATION of this study proposes the development of a dispute tracking system. It would be the purpose of such a system to provide a current status report on all disputes presently in the IDOH resolution process. It would serve as a useful reference on previous dispute resolutions, as well. Each dispute, prior to being sent to the Central Office, would be assigned a dispute number. The recommended format for this dispute number is: district ~ type of contract ~ dispute number ~ year. For example, the tenth dispute on a bridge contract in the Ft.

Wayne district in 1983 would be assigned the dispute number: FB-010-83. In addition, a brief description of the dispute; the amount of money involved; and previous decision, if any; would also be recorded. Once received at the Central Office, the status of the dispute would be updated as decisions are rendered and appeals are made. If the dispute is pending resolution, its current position in the resolution process would be recorded. On the other hand, if the dispute is resolved, the final decision would be recorded. Should any dispute arrive at the Central Office without a proper number and documentation, it should be returned to the sender immediately. This must be done, if the tracking system is to be effective.

IV. The FOURTH RECOMMENDATION of this study involves the formation of a three member Construction Claims Committee. It would be the purpose of this committee to review and render decisions on the more complicated disputes which reach the Central Office. This committee would not eliminate the current resolution system. The straightforward types of disputes received by the Central Office would continue to be resolved by the 'chain of command' approach.

The Committee would consist of: the Engineer of Construction, the Chief Engineer of the Construction Division, and the Deputy Director of Highway Operations. The Chief Engineer of the Construction Division would act as the Chairman of the Committee, and the Engineer of Construction would serve as the Secretary. It would be the first duty of

the Committee to develop specific policies concerning the types of disputes that it would review. Once these policies are developed, the Committee could begin to review disputes.

Initially, a dispute would be submitted to the Central Office by a district through the Engineer of Construction. It would be the Engineer of Construction's responsibility to route all disputes according to the policies set forth by the Construction Claims Committee. If the dispute required the Committee's review, the Engineer of Construction would then forward all documentation on the dispute to the Field Construction Engineer. Otherwise, the dispute would be processed as it is now.

The Field Construction Engineer will be responsible for preparing and presenting his and the District's position on the claim to the Committee. The Contractor will be responsible for the contents of his presentation. The Committee will meet on a regular basis, say monthly, although additional meetings may be scheduled by the Committee, as necessary. In the event that the Committee requires additional information, the presentation of a dispute shall be continued at the next meeting of the Committee. Once a decision has been rendered, both the Contractor and the District Office shall receive written notice of the decision. It is then the District's responsibility to notify the Project Supervisor of the decision.

All appeals of the Construction Claims Committee's decisions shall be made directly to the Director of

Highways. The Director of Highways may request the submission of written statements from the Contractor and/or the Construction Claims Committee, or he may elect to hold a meeting of all interested parties. The Director's decision will be final, and all appeals must be made to a court of law.

V. The FIFTH RECOMMENDATION of this study is the consideration by the IDOH of using arbitration as the final step in their claims resolution system. Arbitration statutes currently exist in Indiana, but no statutes have apparently been written which provide the IDOH with the authority to arbitrate construction contract claims. Because it has been the IDOH's policy not to arbitrate in the past, the Attorney General's Office was unsure as to what legislation, if any, would be needed to give the IDOH the power to arbitrate. Should IDOH personnel wish to seriously consider this recommendation, it is further suggested that the nine states which currently use arbitration be contacted. Most have developed their own arbitration rules, so the IDOH could learn how well several different approaches to arbitration have worked.

6.2.1 Discussion of Recommendations

I. This study has indicated that time extension requests and their related disputes are common and are expected to increase. Consequently, it is in the IDOH's best interest to resolve time extension requests quickly and efficiently before disputes arise. Presently, all time extension requests and related disputes must be reviewed and approved by the Director of Highways. Although some time extension requests are complex and require the Director's review, it is felt that many time extension requests are straightforward and could be resolved more efficiently at the district level. Therefore, it is the recommendation of this study that standard operating policies be instituted which would permit the resolution of clear-cut time extension requests at the district level.

II. It is very important that the monetary limitations placed on IDOH personnel be up to date. These limitations determine the authority of IDOH personnel to make decisions. Limitations which are too low overly restrict the power of IDOH personnel to make decisions. Instead of resolving most of the disputes at the lower levels, they are needlessly sent to higher levels for resolution. There are indications that this is occurring in the IDOH system. The results of both surveys imply that more disputes are being sent to the Central Office than have been in the past. This clogs the resolution process and reduces its efficiency. Consequently, a review of the monetary limits is recommended.

III. Currently, there is no easily accessible record kept of the disputes encountered by IDOH personnel. Many people when asked about disputes were very vague in their responses. Most personnel had not really thought about which disputes are more common, or if any common factors exist between disputes. In addition, many personnel had no idea how many disputes they handled weekly; how much time they spent on disputes; or how many disputes they were able to solve.

A tracking system would provide the IDOH with a record of disputes. This could serve as a reference guide for personnel on how previous disputes have been resolved, and might encourage more uniformity in decisions. It would also eliminate the problem of contractors skipping the district level with disputes. Any dispute not entering the resolution process at a district office would not have a number assigned to it and would be rejected from the resolution process. A tracking system would also provide the IDOH with an up to date report of the current status of all disputes and claims.

IV. The current resolution process used by the IDOH is based on the "chain of command" approach. Dispute resolution begins at the project level. If a dispute is not resolved at the job site, the district level reviews the dispute. When a dispute cannot be resolved at the district level, it is sent to the Central Office. By the time a dispute reaches the Central Office it can already have as

many as three recommendations attached to it. Once at the Central Office, a dispute is reviewed by as many as five people. Consequently, before a dispute is finally resolved at the Central Office, it is possible that an additional four recommendations may have been made.

This resolution process requires several people to examine a dispute before a decision is rendered. From a discussion with the Central Office personnel, it was determined that this current system handles clear-cut disputes reasonably well. However, it is felt that a system of this sort may not work as well on more complex disputes. It was for this reason that the first duty of the Construction Claims Committee would be to determine guidelines for distinguishing between the clear-cut and the complex disputes. It is felt that this should be an in-house effort done by IDOH personnel with ample experience with the types of disputes which currently reach the Central Office.

An internal committee would utilize the same personnel as the "chain of command" approach. Instead of having personnel review a dispute on an individual basis, an internal committee would allow the appropriate personnel to meet at the same time to hear and discuss the dispute. It is felt that committee review would be more efficient and provide better communication between all parties involved.

V. Litigation is used by most transportation agencies, including the IDOH, to resolve claims. Nine states possess the ability to use arbitration, but only two require its

use. After examining both the advantages and the disadvantages of arbitration, the researchers felt that arbitration might prove to be a preferred method of claims resolution.

During the course of this research investigation, it was found that arbitration can take as much time and cost as much money as litigation. However, this is not always the case. Because arbitration has looser procedural rules than litigation, the researchers feel that the potential for both time and cost savings exists. In the short run some cases may cost more to arbitrate and some may cost less to arbitrate, but in the long run it is felt that at worst, arbitration costs will be the same as that of litigation.

In addition, the proceedings are held in a mutually acceptable location, and are less formal than that of a court room. Neither party is restricted by the rigid rules of evidence that are enforced in a court of law, and the privacy of both parties is preserved because the records of the hearings are not subject to public inspection.

The primary reason that the researchers feel that arbitration may be a better resolution method is the expertise of the fact finders. By presenting a case before any individual or group of individuals who are knowledgeable in the area of construction, it is felt that fairer decisions are more likely to be rendered. Instead of spending a large amount of time explaining basic concepts to a judge or jury, both parties could concentrate on presenting the pertinent facts. Experts are able to ask intelligent questions, and

are less likely to be fooled by a smooth but weak presentation.

The primary purpose of this study was to recommend changes in the dispute resolution process of the IDOH which would reduce the number of disputes that evolve into claims. Consequently, because litigation and arbitration are claims resolution methods, not dispute resolution methods, no detailed analysis of either process was done. Nevertheless, during the course of reviewing literature for this study, several interesting points concerning claims resolution were found. Because these points indicated that arbitration may prove to be a preferred claims resolution method, the researchers feel that some recommendation concerning arbitration should be made.

It is therefore, the recommendation of the researchers that the IDOH seriously consider the possibility of using arbitration. It is further suggested that the Attorney General's Office be contacted and that some sort of investigation be started to determine what legislation, if any, would be needed to give the IDOH the power to arbitrate. In addition, most states which do use arbitration develop their own arbitration rules. Consequently, it is felt that the IDOH should contact these nine states and learn specifically how each system works and how well it works. From this information, the IDOH could then develop its own procedures to arbitrate claims.

The recommendations made in this report are presented in concept form only. In order to implement these recommendations, additional review will be needed by IDOH Construction Division Personnel. Also, detailed operating procedures should be developed for each operating policy adopted from the recommendations. The researchers would be willing to assist the IDOH in implementing any of the proposed recommendations into policies.

BIBLIOGRAPHY

1. American Arbitration Association. Construction Industry Arbitration Rules
2. American Arbitration Association. Construction Contract Disputes : How They May Be Resolved.
3. Hohns, H. Murray, Preventing and Solving Construction Contract Disputes, New York: Van Nostrand Reinhold Company, 1979.
4. Jaskaniec, Michael E., Policy for Settlement of Contractor's Disputes and Claims, Wisconsin Department of Transportation, Division of Highways and Transportation Facilities.
5. Richter, Irv, and Kozek, Jeffery B., "Construction Arbitration Procedures," Construction Briefings, a supplement to The Construction Contractor and The Government Contractor, No 78-5, 1978, p.1-13.
6. Torregrossa, Joseph A., "Arbitration v. Litigation ~ A Comparison of the Two Processes and Some Practical Considerations," presented at the Fall 1982, Engineering News ~ Record Conference on Construction Claims & Disputes for Owners & Contractors

APPENDICES

Appendix A

Appendix A

The IDOH Survey

Background Information

- 1) What is your present position with the Indiana Dept. of Highways?
- ☐ Construction Engineer
☐ Area Engineer
☐ Project Supervisor
- 2) How many years have you been in your present position?
- ☐ 0 ~ 1 ☐ 5 ~ 10 ☐ 15 ~ 20
☐ 1 ~ 5 ☐ 10 ~ 15 ☐ 20 +
- 3) How many years have you been employed by the Indiana Dept. of Highways?
- ☐ 0 ~ 1 ☐ 5 ~ 10 ☐ 15 ~ 20
☐ 1 ~ 5 ☐ 10 ~ 15 ☐ 20 +
- 4) Please estimate the number of jobs that you have worked on in each category while in your present position.

type

number

RS ~ resurface

R ~ reconstruct. and/or new work

T ~ traffic

M ~ maintenance

B ~ bridges

Descriptive Analysis of Disputes

- 1) Please rank the following disputes: 1=most common,
12=least common

| | |
|--------------------------|-----------------------------------|
| () time extensions | () precedence set by other dist. |
| () new work | () quantity disagreements |
| () changed work | () interpretation of the specs |
| () material rejections | () errors in the plans |
| () construction quality | () omissions in the plans |
| () delays by contractor | () delays by state |

- 2) Please list any other common disputes that occur.

- 3) Typically, are some types of disputes usually solved at the district level, while others seem to consistently end up at the central office for review?

() yes

() no

- 4) If so, please rank the following types of disputes from 1 to 12, with: 1=almost always solved at the district level, 12=almost always sent to the central office.

If a dispute listed below does not apply, place an X in its blank, and if there are other disputes not listed that are applicable, please add them to the bottom of the list.

- | | |
|-------------------------|----------------------------------|
| ()time extensions | ()precedence set by other dist. |
| ()new work | ()quantity disagreements |
| ()changed work | ()interpretation of the specs |
| ()material rejections | ()errors in the plans |
| ()construction quality | ()omissions in the plans |
| ()delays by contractor | ()delays by state |

- 5) Please evaluate the following factors with respect to how frequently they tend to be associated with disputes.

1=quite often
2=fairly often
3=seldom

- | | |
|--------------------------------|--------------------------|
| () instate contractors | ()rainy season |
| ()out-of-state contractors | ()dry season |
| ()fall of the year | ()type of work |
| ()spring of the year | ()new type of work |
| ()small contractor | ()number of contractors |
| ()medium sized contractor | ()size of project |
| ()large contractor | ()hwy person'l~job site |
| ()field personnel~contractor | ()hwy person'l~dist off |
| ()office personnel~contractor | ()hwy person'l~cent off |

- 6) Please list any other common factors that seem to exist among disputes.

7) Have disputes changed over the years?

() yes

() no

8) If so, please elaborate.

9) Do you see any trends forming with respect to the number and/or types of claims that we may see in the future?

() yes

() no

10) If so, please elaborate.

Quantitative Analysis of Disputes

1) Please indicate how many disputes you are involved with in a typical week.

() 0 ~ 5 () 10 ~ 15 () 20 ~ 30 () 40 ~ 50

() 5 ~ 10 () 15 ~ 20 () 30 ~ 40 () 50 +

- 2) What price range do most of your disputes come in?
1=most frequent, 2=second most frequent, 3=third most frequent

() 1~50 () 500~1000 () 5000~10000 () 20000~50000
() 50~500 () 1000~5000 () 10000~20000 () 50000 +

- 3) Please indicate how many hours, on the average, that you spend on disputes in a typical week.

() 0~1 () 2~3 () 4~5 () 10~15 () 20~30
() 1~2 () 3~4 () 5~10 () 15~20 () 30~40

- 4) How many disputes would you estimate that you are able to solve?

() 20% () 50% () 70% () 80% () 90%
() 40% () 60% () 75% () 85% () 95%

The Current System

- 1) Do you feel that decisions are rendered in a timely manner from the central office?

| | | | | |
|--------|---------|-----------|--------|-------|
| always | usually | sometimes | rarely | never |
| () | () | () | () | () |

- 2) How frequently do contractors skip your level of authority and approach your superiors with a dispute?

| | | | | |
|--------|---------|-----------|--------|-------|
| always | usually | sometimes | rarely | never |
| () | () | () | () | () |

- 3) How would you evaluate the current relationship between the state highway and the contracting community?

| excellent | good | fair | poor |
|-----------|------|------|------|
| () | () | () | () |

- 4) Do you have any suggestions on how to improve this relationship?

() yes () no

- 5) If so, please elaborate.

- 6) Would you change the present process of handling disputes at your level?

() yes () no

- 7) If so, please elaborate.

Suggestions and Alternatives

- 1) How would you react to implementing binding arbitration to replace the current method of litigation as the last attempt to resolve a dispute?

- 2) How would you feel about forming an in-house committee to examine disputes as a last resort before either litigation or arbitration?
- 3) Please list all suggestions or recommendations that you have concerning how disputes could be decreased or how they could be handled differently?

Appendix B

Appendix B

The Contractor Survey

Background Information

- 1) What kind(s) of contracts have you done for the Indiana Department of Highways? Please rank from 1 to 5, with 1=the type of work that you have the most experience in.

() RS ~ resurface

() R ~ reconstruction and/or new work

() T ~ traffic

() M ~ maintenance

() B ~ bridges

- 2) How long have you worked with the Indiana State Highway Department?

() 0 ~ 1 () 5 ~ 10 () 15 ~ 20

() 1 ~ 5 () 10 ~ 15 () 20 +

- 3) Which district(s) have you done work in? 1=most work, 2=second most work, X=no work.

() Laporte () Ft. Wayne

() Crawfordsville () Greenfield

() Vincennes () Seymour

Descriptive Analysis of Disputes

- 1) Please rank the following disputes: 1=most common,
12=least common

| | |
|---|--|
| <input type="checkbox"/> time extensions | <input type="checkbox"/> precedence set by other dist. |
| <input type="checkbox"/> new work | <input type="checkbox"/> quantity disagreements |
| <input type="checkbox"/> changed work | <input type="checkbox"/> interpretation of the specs |
| <input type="checkbox"/> material rejections | <input type="checkbox"/> errors in the plans |
| <input type="checkbox"/> construction quality | <input type="checkbox"/> omissions in the plans |
| <input type="checkbox"/> delays by contractor | <input type="checkbox"/> delays by state |

- 2) Please list any other common disputes that occur.

- 3) Typically, are some types of disputes usually solved at the district level, while others seem to consistently end up at the central office for review?

☐ yes

☐ no

- 4) If so, please rank the following types of disputes from 1 to 12, with: 1=almost always solved at the district level, 12=almost always sent to the central office.

7) Have disputes changed over the years?

() yes

() no

8) If so, please elaborate.

9) Do you see any trends forming with respect to the number and/or types of claims that we may see in the future?

() yes

() no

10) If so, please elaborate.

Quantitative Analysis of Disputes

1) Please indicate how many disputes you are involved with in a typical week.

() 0 ~ 5 () 10 ~ 15 () 20 ~ 30 () 40 ~ 50

() 5 ~ 10 () 15 ~ 20 () 30 ~ 40 () 50 +

- 2) What price range do most of your disputes come in?
1=most frequent, 2=second most frequent, 3=third most frequent

() 1~50 () 500~1000 () 5000~10000 () 20000~50000
() 50~500 () 1000~5000 () 10000~20000 () 50000 +

- 3) Please indicate how many hours, on the average, that you spend on disputes in a typical week.

() 0~1 () 2~3 () 4~5 () 10~15 () 20~30
() 1~2 () 3~4 () 5~10 () 15~20 () 30~40

- 4) How many disputes would you estimate that you are able to solve?

() 20% () 50% () 70% () 80% () 90%
() 40% () 60% () 75% () 85% () 95%

The Current System

- 1) Do you feel that decisions are rendered in a timely manner from the central office?

| | | | | |
|--------|---------|-----------|--------|-------|
| always | usually | sometimes | rarely | never |
| () | () | () | () | () |

- 2) Do you feel the decisions are rendered in a timely manner from the district office(s)?

| | | | | |
|--------|---------|-----------|--------|-------|
| always | usually | sometimes | rarely | never |
| () | () | () | () | () |

- 3) How would you evaluate the current relationship between the state highway and the contracting community?

excellent good fair poor

() () () ()

- 4) Do you have any suggestions on how to improve this relationship?

() yes

() no

- 5) If so, please elaborate.

- 6) Can you offer any explanations as to why Indiana contractors as a whole, do not have a history of filing court claims against the Indiana State Highway Department?

Suggestions and Alternatives

- 1) How would you react to implementing binding arbitration to replace the current method of litigation as the last attempt to resolve a dispute?

If a dispute listed below does not apply, place an X in its blank, and if there are other disputes not listed that are applicable, please add them to the bottom of the list.

- | | |
|-------------------------|----------------------------------|
| ()time extensions | ()precedence set by other dist. |
| ()new work | ()quantity disagreements |
| ()changed work | ()interpretation of the specs |
| ()material rejections | ()errors in the plans |
| ()construction quality | ()omissions in the plans |
| ()delays by contractor | ()delays by state |

- 5) Please evaluate the following factors with respect to how frequently they tend to be associated with disputes.

1=quite often
2=fairly often
3=seldom

- | | |
|--------------------------------|--------------------------|
| ()instate contractors | ()rainy season |
| ()out-of-state contractors | ()dry season |
| ()fall of the year | ()type of work |
| ()spring of the year | ()new type of work |
| ()small contractor | ()number of contractors |
| ()medium sized contractor | ()size of project |
| ()large contractor | ()hwy person'l-job site |
| ()field personnel~contractor | ()hwy person'l-dist off |
| ()office personnel~contractor | ()hwy person'l-cent off |

- 6) Please list any other common factors that seem to exist among disputes.

